2002 Louisiana Environmental Inventory Report

A compilation of data from:

Toxics Release Inventory
Toxic Emissions Data Inventory
Emissions Inventory

2nd Annual Edition

April 2004

LDEQ's New Home
602 N. Fifth Street * Baton Rouge, Louisiana * 70802

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Louisiana
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For the citizens of Louisiana

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We extend our genuine thanks and appreciation for their commitment to this program. It is our hope that the distribution of information by this agency will enhance the environmental awareness of the citizens of Louisiana. With your support, we will continue working toward the overall mission of this agency and the protection of human health and the environment.

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State of Louisiana
Department of Environmental Quality

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

April , 2004

Dear Readers:

The Louisiana Department of Environmental Quality is pleased to release the *2002 Louisiana Environmental Inventory Annual Report*. This report is a compilation of environmental inventory data submitted to the agency by regulated facilities. The publication of this report is part of the agency's renewed commitment to maintain a safe and healthy environment for the citizens of Louisiana.

As in the 2001 Report, we have elected to provide a more comprehensive view of the environmental data collected by the agency. Again, data from the Emissions Inventory (EI) and Toxic Emissions Data Inventory (TEDI) Programs have been consolidated with TRI data into one publication. The 2002 data continue to reflect an overall reduction in the release of toxic chemicals to our environment. As a reminder, the data presented in this report are reflective of facility releases from January 1, 2002 to December 31, 2002 submitted to the agency according to program deadlines. EI data were submitted by March 31, 2003 while TRI and TEDI data were submitted to the agency by July 1, 2003. After the data were compiled and verified for accuracy, the consolidated report was prepared for publication.

Through this more comprehensive presentation of the data, we maintain our pledge to the public to promote and achieve environmental improvements that lead to a better quality of life for all Louisianians.

Sincerely,

Mike D. McDaniel, Ph.D.
Secretary

Executive Summary

The 2002 Louisiana Environmental Inventory Annual Report illustrates that the state continues to display a downward trend in the toxic chemical emissions reported to the inventory programs, Toxics Release Inventory (TRI), Emissions Inventory (EI), and the Toxic Emissions Data Inventory (TEDI). Each inventory program has different reporting requirements as shown in the "Foreword" of this report.

Toxics Release Inventory

The 2002 Louisiana Environmental Inventory Report includes data from approximately 376 Toxics Release Inventory (TRI) facilities, which submitted over 2,800 forms by the due date of July 1, 2003. Ascension Parish had the most TRI releases, with 20 TRI facilities that reported over 23 million pounds of TRI chemicals. The facility with the greatest TRI release total was Cytec Industries in Jefferson Parish, which reported over nine million pounds in releases. The TRI chemical for 2002 with the greatest total releases was ammonia (over 19 million pounds reported).

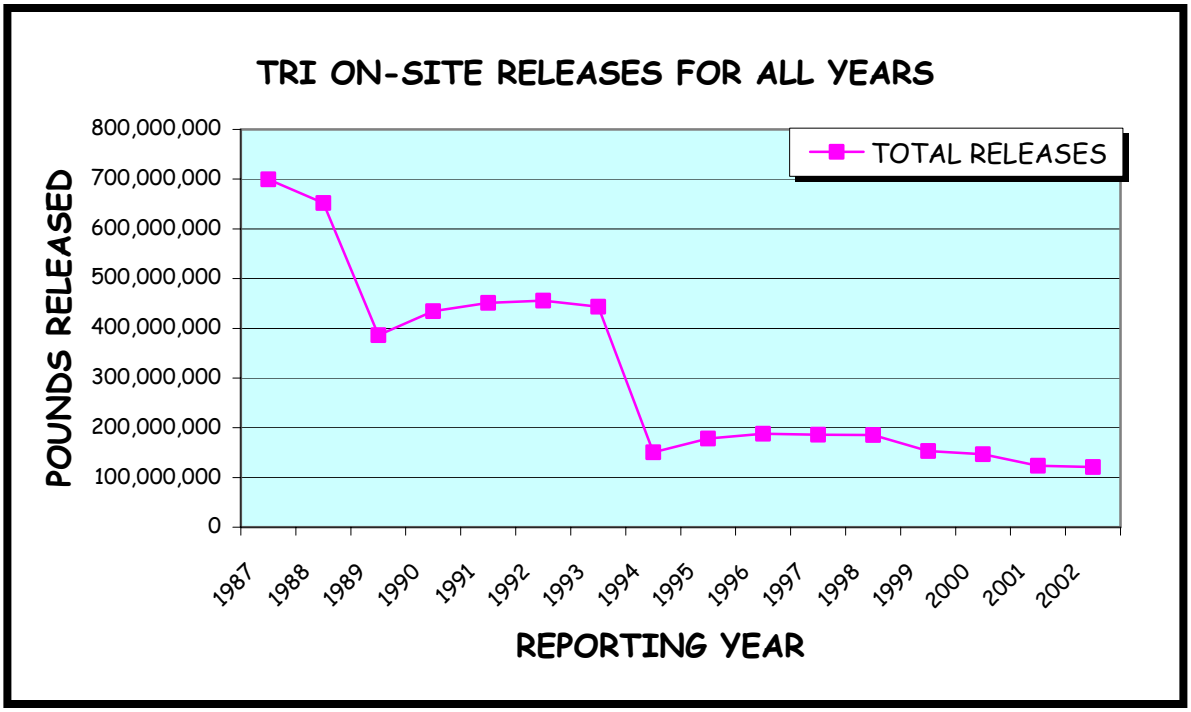


Figure 1-TRI ON-SITE RELEASES FOR ALL YEARS. This figure summarizes releases submitted for all TRI chemicals (excluding dioxins), all facilities, and all media (i.e., air, water, land, and injection). Louisiana data indicates a decline of 578 million pounds (83%) since 1987, and a decline of two million pounds (2%) from 2001-2002.

Emissions Inventory

This publication also contains Emissions Inventory (EI) data for over 900 facilities, which submitted data by the due date of March 31, 2003. Approximately 388,000 tons of Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) were reported statewide. Overall, emission for VOC's have decreased by 40% (51,645 tons) since 1990 and statewide NOx emissions have decreased by 25% (100,941 tons) since 1990. Calcasieu Parish was the leading emitter of VOC and St. Charles was the leading emitter of NOx. The top facility for reported VOC emissions was Citgo Petroleum, in Calcasieu Parish. The primary facility for reported NO_x emissions was Entergy's Ninemile Plant, in Jefferson Parish.

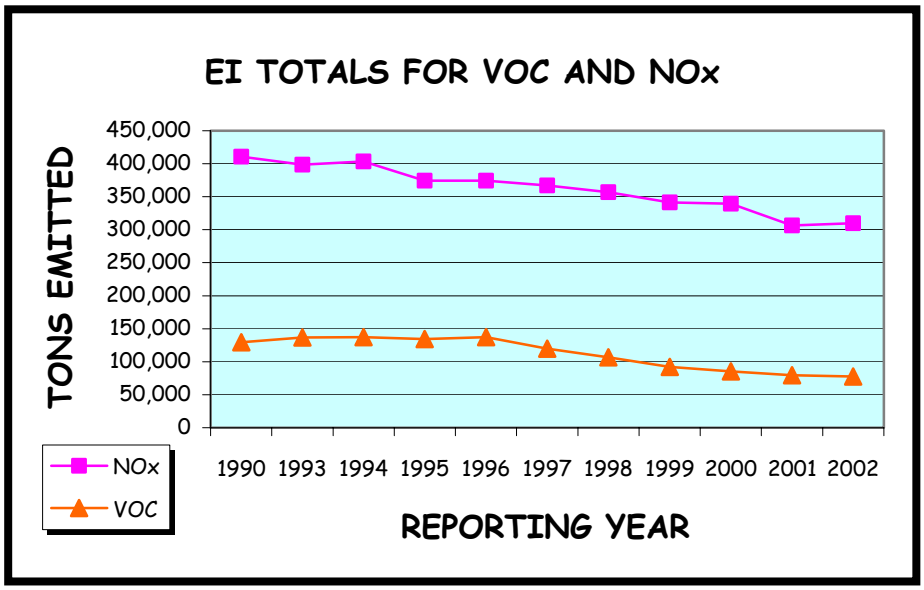


Figure 2-EI TOTALS FOR VOC AND NOx. This figure includes data from all EI point sources and the reported VOC and NOx releases to the air. A downward trend is observed for both chemicals since 1990.

Toxic Emissions Data Inventory

The Louisiana Environmental Inventory 2002 publication also details Toxic Emissions Data Inventory (TEDI) data for approximately 360 facilities, which reported over 53 million pounds of Toxic Air Pollutants (TAPs) by the July 1, 2003 due date. Ascension Parish was the top-ranked parish, with over 13 million pounds of TEDI chemicals reported. Included in the total emissions for Ascension Parish are 6.8 million pounds of TAPs reported by CF Industries, the number one facility according to reported 2002 TEDI data. The leading chemical reported under the TEDI program was ammonia (approximately 16 million pounds).

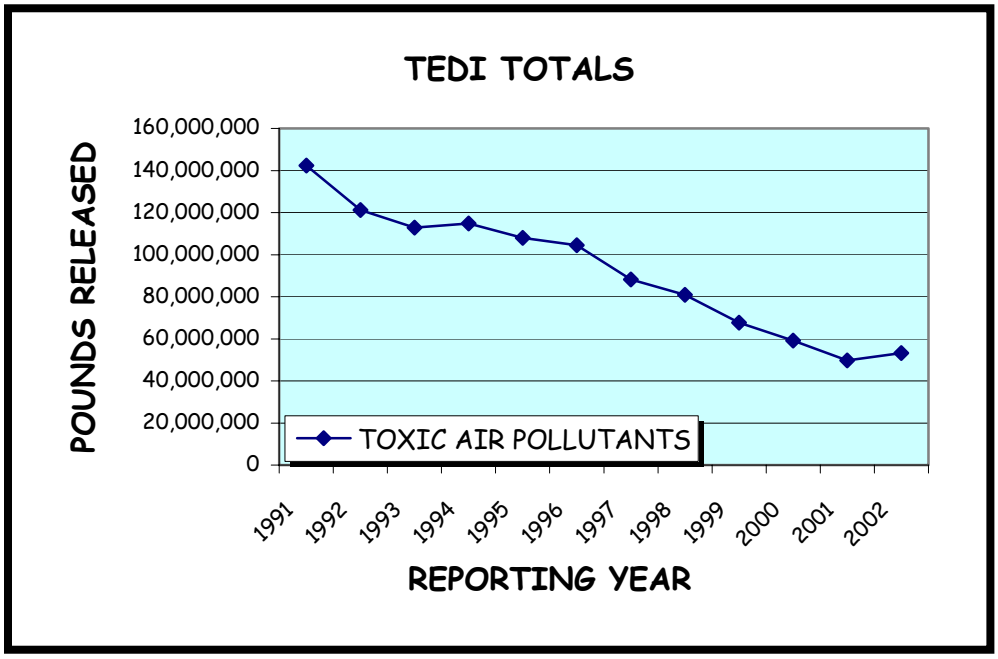


Figure 3-TEDI TOTALS. All TEDI chemicals released to air reported by all facilities are totaled in this figure. TAPs releases decreased by 63% (89 million pounds) since 1991, and increased by 7% (three million pounds) from 2001-2002.

Foreword

Protecting the environment and promoting the health, safety and welfare of the people of Louisiana is the overall mission of the Department of Environmental Quality (LDEQ). Through its Office of Environmental Assessment, the agency provides an effective means to develop and implement environmental regulations, construct strategic plans, inventory and monitor emissions, report on the performance of the environment, offer technical expertise, and perform remediation of contamination in the environment.

In order to protect the environment, state and federal government mandates that industrial facilities comply with all applicable regulations, including those requiring the annual monitoring and reporting of emissions to the environment. These annual reports include the *Toxics Release Inventory (TRI),* the *Emissions Inventory (EI)*, and the *Toxic Emissions Data Inventory (TEDI).* Prior to the agency's reorganization completed in 2000, the regulatory programs for each of these reports were under different offices within LDEQ. Both the EI and TEDI Programs were in the Office of Air Quality, and the TRI Program resided in the Office of the Secretary, Technical Support Section. Since then, these inventory sections have been brought together under the Environmental Evaluation Division in the Office of Environmental Assessment. A brief comparison of the inventory programs is shown in the table below:

Figure 4. Comparison of Inventory Programs

Program	Federal Statute	State Regulation	Baseline Year	Reporting Media	# Reportable Chemicals	Facility Sources	Submission Deadline
TRI	Emergency Planning and Community Right-to-Know Act of 1986	Environmental Quality Act Section 2011.1	1987	Air, Injection, Land, Water	650 Toxic Chemicals	Specified Standard Industrial Classification (SIC) Codes	July 1
TEDI	Clean Air Act of 1990	LAC 33:III. Chapter 51	1991	Air Only	200 Toxic Air Pollutants	Major & Some Minor Sources of Toxic Air Pollutants	July 1
EI	Clean Air Act of 1990	LAC 33:III. Chapter 9	Varies by Pollutant	Air Only	6 Criteria Pollutants	Sources of Criteria Air Pollutants	March 31

As indicated in the preceding table, each of these inventory programs targets specific chemicals, facility sources and media. Although the reporting requirements vary for all three programs, they are not mutually exclusive; therefore, a facility may have to submit a report to each of these three programs (by the appropriate deadline) if the requirements for each are met. Since these programs have been brought together under the same division, the annual submissions of reporting facilities are more closely monitored, which has improved the quality of the data collected by the inventory programs. It is the overall goal of this agency to continue to seek new ways to improve and enhance data quality.

Chapter 1-Toxics Release Inventory (TRI)

The Toxics Release Inventory (TRI) is a database maintained at the federal and state level. The program provides the public with information on the uses, location, and release of hazardous and toxic chemicals in their community. This requirement, as set forth in Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (42 U.S.C. 11001-11050), mandates that specific facilities provide release and transfer information to both the Department of Environmental Quality (DEQ) and United States Environmental Protection Agency (USEPA) for dissemination to the public. States and communities, in cooperation with industries, can utilize this information to improve chemical safety, protect public health, and preserve our environment. Louisiana remains steadfast in its commitment to making this information accessible to the public by various means.

Bhopal, India pesticide plant: Site of fatal accident that prompted the enactment of EPCRA.

A Right to Know. On December 3, 1984, the toxic gas methyl isocyanate leaked from a pesticide manufacturing plant in Bhopal, India killing thousands of people and injuring over 10,000 more. This industrial disaster, as well as several other serious incidents later occurring in the United States, highlighted the importance of public awareness and emergency planning for community safety.

Acknowledging the need for additional protection and awareness, the United States Congress passed Title III of the Superfund Amendments and Reauthorization Act of 1986, also known as the Emergency Planning and Community Right-to-Know Act (EPCRA). Prior to the implementation of this dual-purpose legislation, the presence of toxics and industrial releases was not made readily available to the public and facilities were not required to disclose this information.

EPCRA

Superfund Amendments and Reauthorization Act (SARA)

Title III: **Emergency Planning and Community Right-to-Know Act** October 17, 1986

Subtitle A Emergency Planning and Notification		**Subtitle B** Reporting Requirements		**Subtitle C** General Provisions	
Section 301	Establishment of State Commissions, Planning Districts and Local Committees	Section 311	Material Safety Data Sheets	Section 321	Relationship to Other Laws
Section 302	Substances/Facilities Covered and Notification	Section 312	Emergency & Hazardous Chemical Inventory Forms (Tier Two Forms)	Section 322	Trade Secrets
Section 303	Comprehensive Emergency Response Plans	Section 313	Toxics Release Inventory Forms (Form R, Form A)	Section 323	Provision of Information to Health Professionals, Doctors & Nurses
Section 304	Emergency Notification			Section 324	Public Availability of Plans, Data Sheets, Forms and Follow-up Notices
Section 305	Emergency Training & Review of Emergency Systems			Section 325	Enforcement
				Section 326	Civil Actions
				Section 327	Exemptions
				Section 328	Regulations
				Section 329	Definitions
				Section 330	Authorizations of Appropriations

State Impact. With its abundance of chemical industries, the state of Louisiana quickly acknowledged its citizens' rights to know about the risks of hazardous materials in their environment. The Hazardous Materials Information Development, Preparedness, and Response Act (Act 435), Louisiana's first "Right-to-Know" Act, was implemented in 1985.

The 1987 Legislative Session passed Act 437, thereby amending the Louisiana Right-to-Know Act to align all state laws with those set forth in EPCRA 1986. In 1988, the Louisiana Department of Environmental Quality was given the responsibility of upholding and enforcing EPCRA Section 313, the Toxics Release Inventory. Henceforth, owners and operators of certain manufacturing facilities subject to Section 313 reporting should submit their toxic chemical release forms to this agency.

When EPCRA was enacted in 1986, one of the requirements was the establishment of a State Emergency Response Commission (SERC), which was appointed by each state's governor. This commission is in charge of implementing a hazardous materials information system regarding Community Right-to-Know. To more effectively achieve this goal, the SERC designates Local Emergency Planning Committees (LEPCs) to enforce EPCRA on a local level. Louisiana's SERC and LEPC operate within the Department of Public Safety and Corrections, which is the primary entity for SARA and the state right-to-know responses. More specifically, SERCs and LEPCs are governed by the Louisiana Office of Emergency Preparedness (LOEP).

What Are SERCs and LEPCs?

The Governor of each state designated a State Emergency Response Commission (SERC). The SERCs, in turn, designated about 3,500 local emergency planning districts and appointed Local Emergency Planning Committees (LEPCs) for each district. The SERC supervises and coordinates the activities of the LEPC, establishes procedures for receiving and processing public requests for information collected under EPCRA, and reviews local emergency response plans.

The LEPC membership must include, at a minimum, local officials including police, fire, civil defense, public health, transportation, and environmental professionals, as well as representatives of facilities subject to the emergency planning requirements, community groups, and the media. The LEPCs must develop an emergency response plan, review it at least annually, and provide information about chemicals in the community to citizens.

In 2003, LOEP was renamed the Louisiana Office of Homeland Security and Emergency Preparedness (LHLS & EP). As a result, SERCs/LERCs now have duties and responsibilities that include supporting the state's Homeland Security needs and addressing related issues.

The following websites may provide additional information:

EPA's Chemical Emergency Preparedness and Prevention Office
http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/index.html

Louisiana SERC Chemical Hazards Information
http://www.loep.state.la.us/nuk_chemical/chemihaz.htm

Louisiana Office of Homeland Security and Emergency Preparedness
http://www.loep.state.la.us/

East Baton Rouge Parish Local Emergency Planning Committee
http://brgov.com/Dept/OEP/lepchome.htm

Due to changes in the reporting requirements and the periodic submissions of revisions by facilities, the TRI database output changes constantly. As a result, data retrieved from the system on different dates may create discrepancies between customized reports and the annual publication. However, the agency's goal remains to provide the most accurate and up-to-date information upon request.

1.1 Reporting Under TRI

Reporting Criteria. Section 313 of EPCRA requires facilities to report releases of toxic chemicals if:

1. They have 10 or more full-time employees.

   AND

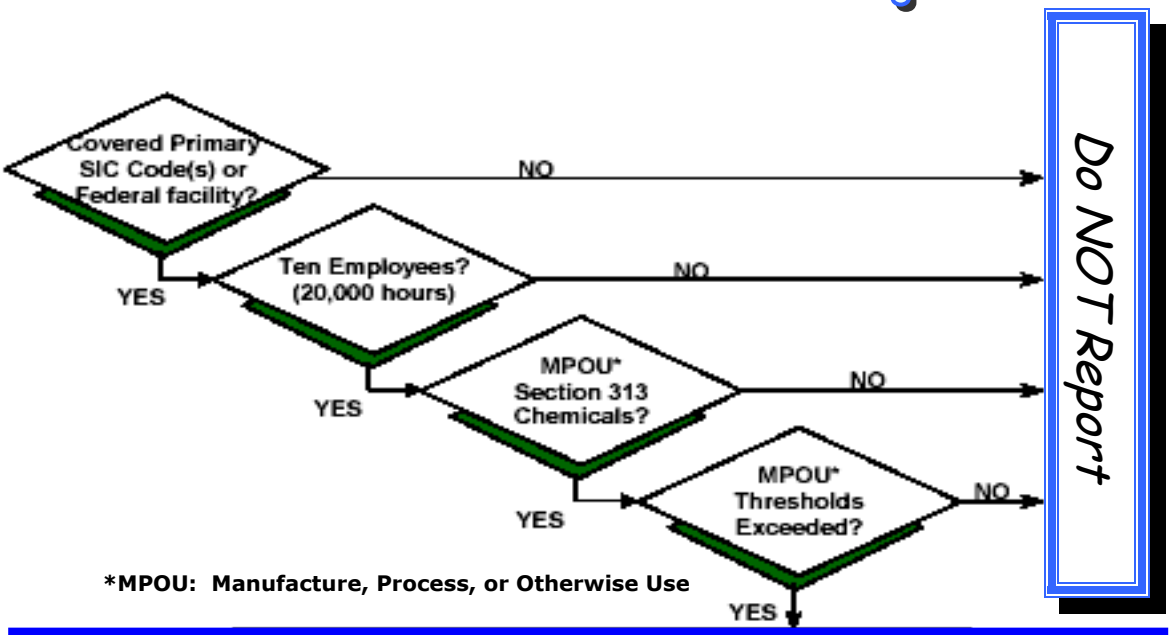
2. They operate under Standard Industrial Classification (SIC) codes 20-39, or in the following industrial sectors, metal mining, coal mining, electric utilities, commercial hazardous waste treatment facilities, chemical and allied products wholesale, petroleum bulk terminals and plants wholesale, solvent recovery services, or is a federal facility.

   AND

3. They exceed the "manufacture" or "process" threshold of 25,000 pounds or the "otherwise used" threshold of 10,000 pounds, for any listed toxic chemical.

- **Full-time** *means that* ***a person is employed for 2,000 hours or more per year.***
- **SIC Codes** *consist of four digits; the first two numbers identify the major business sector, and the other two define the specialty within the major sector.*
- **Manufacture** *is defined as producing, preparing, compounding or importing a listed Section 313 chemical.*
- **Process** *is defined as preparing a listed Section 313 chemical after its manufacture for distribution in commerce.*
- **Otherwise used** *is defined as any activity involving a listed 313 chemical, at a facility that* ***is*** *not encompassed by the definition of manufacture or process. An "otherwise used" chemical is not intentionally incorporated into a product distributed in commerce.*

Who should report?



***MPOU: Manufacture, Process, or Otherwise Use**

ALL REPORTING REQUIREMENTS MET

SUBMIT FORM R / FORM A FOR ELIGIBLE CHEMICALS

TRI Submittals. A toxic chemical release inventory (**Form R or Form A**) must be filed for each listed chemical that is manufactured, processed or otherwise used above the threshold limits in a calendar year. The Form R provides estimated quantities of chemicals released into the air, water, underground injection wells, and land environments as determined by previously obtained, readily available measurements or monitoring data. A facility is not required to initiate any new monitoring or take any additional measurements to obtain values for the amount of chemicals released. If monitoring or measurement data is not available, release values are estimated based on published emissions factors, mass balance equations, or engineering judgment.

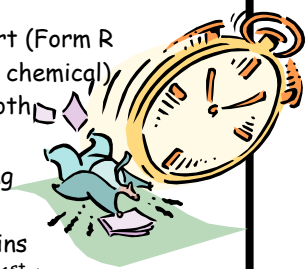
THE FORM R CONTAINS:

- Facility's physical address
- Contact person regarding reported information
- Facility's specific permit number
- On-site use of the reported chemical
- Maximum amount of the chemical on-site
- Estimated amount of the chemical released into the environment by media
- Names and addresses of Publicly Owned Treatment Works (POTW's) and other off-site locations and the amount of the chemical sent for other waste management
- Estimated amount of the chemical released due to remedial actions, catastrophic events or one-time events not associated with the production process (accidental releases)
- On-site waste treatment efficiency
- On-site recycling and energy recovery processes
- Production ratio or activity index

Alternative Threshold (Form A). As an alternative to the more complex Form R, the EPA published *TRI Alternative Threshold for Facilities with Low Annual Reportable Quantities* in 1994 (59 FR 61488). The Form A (or Certification Statement) is intended as a means to reduce the compliance burden associated with EPCRA Section 313 reporting. According to this rule, a facility may submit the Form A on a per-chemical basis if it meets the following requirements:

REPORT DEADLINE

The complete TRI Report (Form R or Form A for each TRI chemical) must be submitted to both the DEQ and EPA by **July 1st** of the following year. For example, this annual publication contains TRI data from January 1st to December 31st 2002, which was submitted to the DEQ and EPA by July 1, 2003.



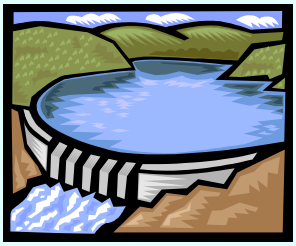
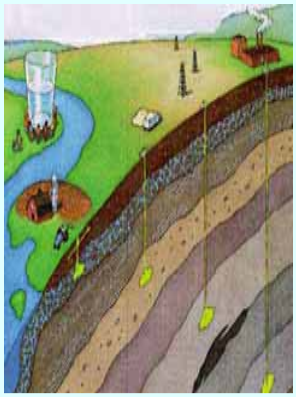
- Does not exceed 1,000,000 pounds manufactured, processed, or otherwise used.
- Does not exceed 500 pounds for the total annual reportable amount* for a Section 313 chemical.
- It is not a PBT chemical.

If alternate threshold criteria are met:

- Form R report is not required.
- No release, other waste management, or source reduction is reported.
- Submit certification statement (Form A).

**Annual reportable amount* = total releases (including off-site disposal) + waste management activities

1.2 TRI Terms Defined

RELEASE	A release is a discharge of a toxic chemical to the environment. Releases are reported in Section 5 of the Form R as one of 4 media types: • ***Air, Land, Water, or Injection*** Chemicals transferred off-site for disposal are also considered to be releases, and are reported in Section 6 of the Form R.
ON-SITE LAND RELEASES 	On-site releases to land occur within the boundaries of the reporting facility. Releases to land include the following: • ***Landfills***--toxic wastes are buried. Since 1996, amounts released to RCRA Subtitle C landfills (designed for maximum containment) are reported separately. • ***Land treatment/application farming***--waste containing a TRI chemical is incorporated into soil. • ***Surface impoundments***--uncovered holding areas used to volatize and/or settle waste materials. • ***Accidental releases*** to land (i.e. spills, leaks). • ***Other land disposal methods*** (i.e. waste piles).
OFF-SITE RELEASES	Toxic waste is transferred to a facility that is geographically or physically separate from the waste originator. At the off-site facility, the toxic wastes are generally either released to land or injected underground.
AIR EMISSIONS 	Air releases are reported either as point source or fugitive emissions. • ***Point source emissions*** can be referred to as *stack emissions*, and occur through confined air streams (i.e., stacks, vents, ducts, pipes). • ***Fugitive emissions*** are air releases that are not released through a confined air stream. Equipment leaks, evaporative losses from surface impoundments or spills, and releases from building ventilation systems are examples of fugitive emissions.
SURFACE WATER DISCHARGES	Releases to water include discharges to streams, rivers, lakes, oceans and other bodies of water. Releases from contained sources, such as industrial process outflow pipes or open trenches are also included. In addition, releases due to runoff, including stormwater runoff, are also reported to TRI.
UNDERGROUND INJECTION 	Underground Injection is defined as the subsurface emplacement of fluid through wells. Provided they do not endanger *underground sources of drinking water (USDW),* public health, or the environment, TRI chemicals may be injected into one of 5 well Classes: • ***Class I*** wells are deep, isolated rock formations separated from USDW by impermeable rock and clay; they are used primarily by industrial, municipal, and manufacturing facilities. • ***Class II*** wells inject oil and gas related fluids for disposal, enhanced recovery of oil, or hydrocarbon storage. • ***Class III*** wells are used in the solution mining of minerals, especially salt and uranium. • ***Class IV*** wells inject hazardous or radioactive fluids directly in USDW; only waste generated as part of an authorized CERCLA/RCRA clean up operation is injected into Class IV wells. • ***Class V*** wells include all types of injection wells that do not fall under Classes I-IV. Generally, they are shallow drainage wells, such as floor drains connected to dry wells or drain fields. Since the 1996 reporting year, facilities separately report amounts injected into Class I wells and into all other wells (see above Class II - Class V).

1.3 TRI Benefits and Limitations

Benefits. The purpose of the TRI program is to provide public access to toxic chemical release and chemical transfer data at the local, state, regional and national level. Responsible use of the data can help the public gain a better understanding of potential risks, and to reduce toxic chemical releases and the associated risks (by working with industry and government). ***Citizen groups*** have used TRI data as a tool to open the lines of communication with industrial neighbors and develop common goals focused on a healthier environment.

Government can use the data to compare facilities or geographic areas, identify areas of concern, evaluate existing environmental programs, more effectively set regulatory priorities, and to track pollution control and waste reduction. TRI data, along with demographic data, can assist government agencies in identifying potential environmental justice concerns.

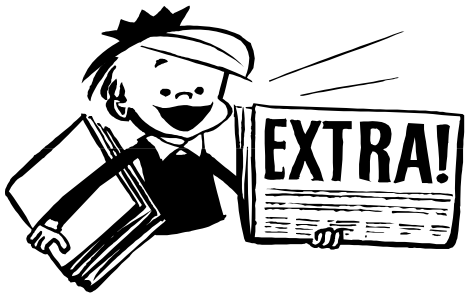
Industry can use the data to obtain an overview of release and management of toxic chemicals, identify areas to reduce costs in the management of toxic chemicals in waste, establish reduction targets and monitor progress toward reduction goals.

Limitations. TRI data is a key source of environmental data, however, there are some limitations that must be considered when using the data.

- **The TRI program does not cover all sources of releases or waste management activities.** Although the 1998 TRI expansion broadened the range of entities that must report, many non-industrial sources are still omitted. Also, facilities that do not meet the employee or quantity threshold are not required to report.
- **Numerous sources of toxic chemical releases are not subject to TRI reporting.** While TRI captured over 7 billion pounds of on-site and off-site releases last year, only a portion of toxic chemical releases nationwide are represented by the data. For instance, the TRI program does not capture data on emissions from motor vehicles nor from the majority of sources that release volatile organic compounds, pesticides, and fertilizers.
- **Some facilities report estimated data instead of monitoring data.** Since release monitoring is not mandated, facilities may estimate their release using various estimation techniques. The use of estimation guidance documents published by the EPA helps facilitate consistency, however, variations within industry sectors are still likely. As such, these limitations may affect data accuracy and comparability.
- **Release estimates alone are not enough to determine exposure or to calculate the risk of adverse effects on human health**. Other factors to consider when using TRI data include:

    - ***Toxicity of the chemical*** - small releases of highly toxic chemicals may pose greater risks than large releases of less toxic chemicals.
    - ***Exposure*** - the potential for exposure increases the longer a chemical remains unchanged in the environment. Some chemicals quickly break down into simpler, less toxic forms, while others accumulate in the environment and become a potential source of long-term exposure.
    - ***Type of Release*** - chemical exposure of a population depends on the environmental medium (air, water, etc.) where the chemical is released. The medium determines the type of exposures possible, such as inhalation, dermal exposure, or ingestion. Individual characteristics (age, sex, family traits, life style, etc.) are also factors to consider when assessing the potential health effects of a chemical.

1.4 What's New in TRI?



Revisions to Form R for Reporting Year 2003.

In response to Phase I of the 2002 stakeholder dialogue, EPA redesigned the Form R in an attempt to improve the timely public release of quality data. In particular, the dialogue addressed: (1) data collection and processing, (2) data presentation/analysis, and (3) compliance assistance for the reporting. As a result, the following changes will be made to next year's Form R:

- The TRI Federal ID, Reporting Year, and Chemical ID will be added to every page.
- *Surface Impoundments* (Section 5.5.3) will be broken out into RCRA Subtitle C Surface Impoundments (Section 5.5.3.A) and Other Surface Impoundments (Section 5.5.3.B).
- In *Transfers of the Toxic Chemical in Wastes to Off-site Locations* (Section 6), the existing code M63 (Surface Impoundment) will be replaced with codes M66 (RCRA Subtitle C Surface Impoundment) and M67 (Other Surface Impoundments). Because of changes to Section 8.1, the existing code M71 (Underground Injection) will be replaced with codes M81 (Underground Injection to Class I Wells) and M82 (Underground Injection to Class II-V Wells).
- In Section 7B (On-site Energy Recovery Processes), Other Energy Recovery Methods (code U09) will not be used since the only energy recovery methods are combustion in a boiler or industrial furnace.
- Section 8.1 (Quantity Released) will be broken out into two on-site and two off-site categories:
    - **8.1.a.** Total on-site disposal to Underground Injection to Class I Wells, RCRA Subtitle C landfills, and other landfills.
    - **8.1.b.** Total other on-site disposal or other releases.
    - **8.1.c.** Total off-site disposal to Underground Injection to Class I Wells, RCRA Subtitle C landfills, and other landfills.
    - **8.1.d.** Total other off-site disposal or other releases.

Revisions Phase II. The EPA is currently reviewing comments from Phase II of the stakeholder dialogue. The goal of this phase is to gather suggestions from facilities, states, and tribes on how to reduce the burden associated with TRI reporting. EPA is evaluating the feasibility of the following options:

- Higher reporting thresholds for small businesses.
- Higher reporting thresholds for a specific sector or class of chemicals with small reportable amounts.
- Expanded eligibility requirements for the Form A Certification Statement, through either a higher alternate reporting threshold, a higher annual reportable amount threshold, and/or a revised definition of the annual reportable amount threshold. This option could be combined with an enhanced Form A that provides range estimates for a subset of the full release and other waste management information included on the Form R.
- A new short form for facilities that are able to certify that they have had no significant change in releases and other waste management quantities relative to a designated baseline year.
- Use of range reporting for Section 8 of the Form R.
- Specific enhancements to the Toxics Release Inventory - Made Easy (*TRI-ME*) software that would reduce the burden of TRI reporting.

Chapter 2-2002 TRI Data in Louisiana

The enactment of EPCRA in 1986 has played an essential role in heightening the environmental awareness of Louisiana's citizens. Citizens are increasingly becoming more involved in environmental issues that may impact their daily lives, and are taking advantage of the wealth of environmental information available through various sources. TRI data is available through various publications and websites, supported at the local, state and national level. Chapter 2 contains data that are ranked using pounds or grams released. It is also important, however, to consider exposure time, chemical toxicity, and type of release (as described in Section 1.3) when determining potential health risks associated with TRI data.

2.1 Release Totals

For the 2002 Reporting Year, 376 Louisiana facilities submitted 2,875 forms, including 295 certification statements (i.e., Form A). A total of 256 TRI chemicals were reported. Data submitted also included a fifth year for 36 New SIC facilities, and a third year of release information for PBT (***P***ersistent, ***B***ioaccumulative, and ***T***oxic) chemicals.

A total of 121 million pounds of TRI chemicals were released in 2002; discharges to all media (i.e., air, water, land, and underground injection) are included in this total. Since the inception of the TRI program, releases have decreased by 83% (578 million pounds), and a reduction of 2 million pounds (2%) is evident when compared to 2001 totals.

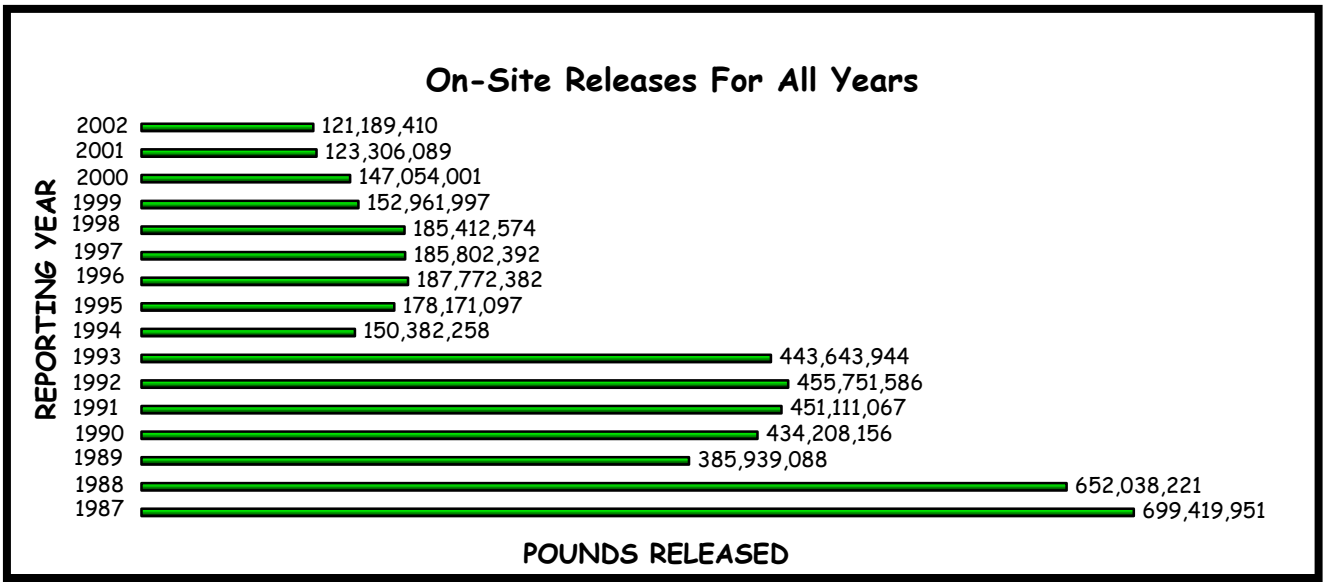


Figure 5-On-Site Releases For All Years. As illustrated with this graph, on-site TRI releases display a downward trend since the inception of the program in 1987. From 2001-2002, releases have also decreased (by 1.7%). Data includes all TRI facilities and chemicals, except dioxins, and accounts for all media (i.e., air, water, land, and underground injection).

Out of the total 121 million pounds of toxic chemicals released, air releases represented 48% (59,145,907 pounds); water releases contributed 10% (11,674,097 pounds); land releases represented 15% (18,071,831 pounds); and 32,461,106 pounds (27%) was injected into underground wells. All data for underground injection refers to Class I wells (see Section 1.2). When off-site disposals are included, the TRI total increases to 128,305,689 pounds; off-site releases account for 6% (7,116,276 pounds) of this total. Figures 6 and 7 summarize this information.

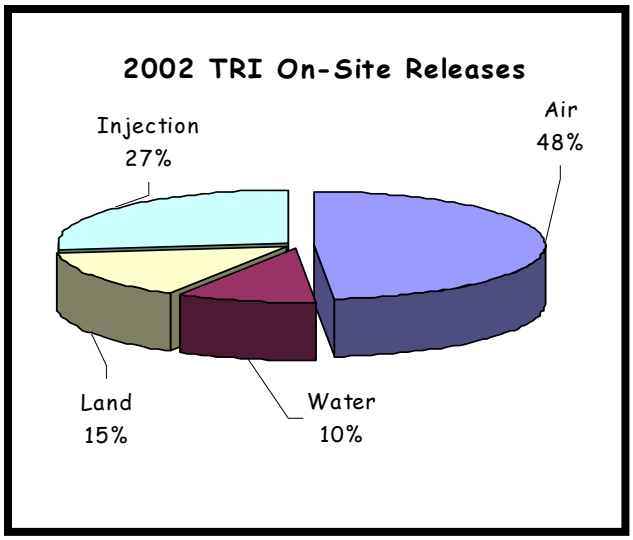


Figure 6-2002 TRI Releases On-Site. This graph shows the percent each media contributed to the total TRI releases.

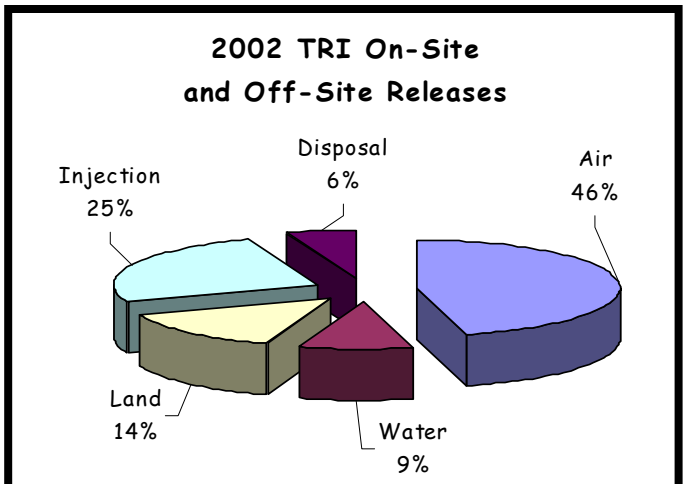


Figure 7-2002 On-Site and Off-Site Releases. This graph shows the percent each media contributed to the total TRI releases for 2002 when off-site Transfers (Disposal) are included.

2.2 Core Chemicals

Since 1987, many chemicals and chemical categories have been added or removed from the TRI list. The subset, **Core Chemicals**, represents the group of chemicals that have been consistently reported throughout all of the reporting years. These chemicals are tracked to provide a consistent platform for analyzing trends since the inception of the program. The Core Chemical value represents the total releases minus the totals for PBT, Delisted, and 1995 Chemicals subgroups.

For Reporting Year 2002, 101 million pounds of Core Chemicals were reported. Fifty-three percent of the total Core Chemicals were released to air, water releases were 2%, land releases were 15%, and injection releases were 30%. Core Chemical releases have decreased by 35% (55.9 million pounds) since 1995.

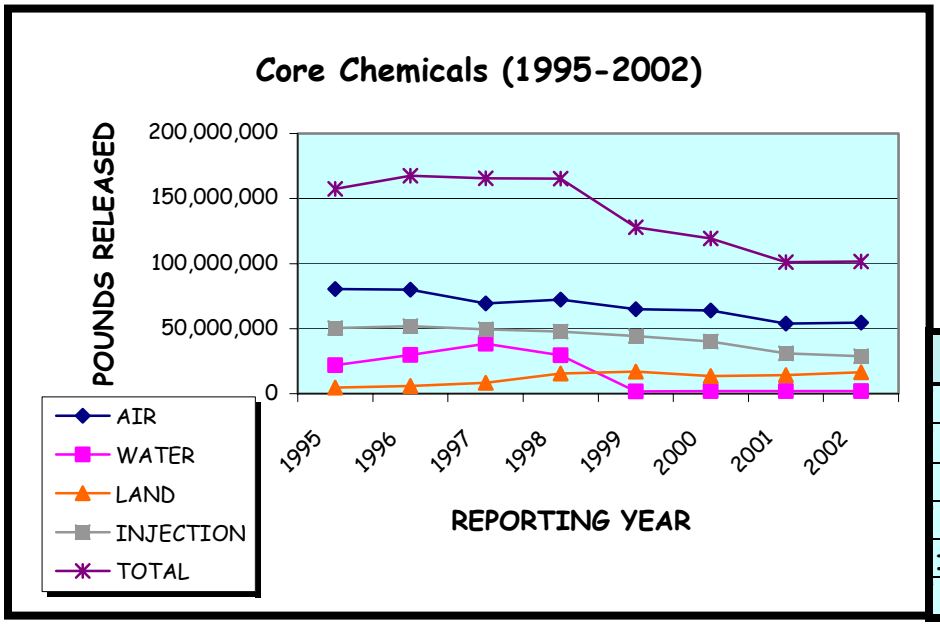


Figure 8-Core Chemicals (1995-2002). Core Chemical releases have decreased since 1995. Totals represent 53% released to air, 2% to water, 15% to land, and 30% to injection.

CORE CHEMICALS		
	1995	2002
AIR	80,432,224	54,513,212
WATER	21,802,277	1,882,510
LAND	4,792,032	16,390,583
INJECTION	50,398,985	28,783,476
TOTAL	157,425,518	101,569,781

2.3 1995 Chemicals

In 1995, EPA added 313 new chemicals and chemical categories to the TRI program, almost doubling the TRI chemical list. Hence, these chemicals belong to the subset **1995 Chemicals**. Since this addition, there are approximately 640 chemicals and chemical categories on the TRI list. In Louisiana, 47 of the subset 1995 Chemicals were reported for 2002. As with the Core Chemicals subset, year-to-year comparisons of the 1995 Chemicals provide the most accurate presentation of the data.

In 2002, the 1995 Chemicals total releases were 18,572,742 pounds, which represents an 11.7% decrease since the first reporting year. Air releases were 24% (4,591,133 pounds) of the total, water releases were 52%, (9,616,792) pounds land releases were 4% (724,086 pounds), and underground injections were 20% (6,122,677 pounds).

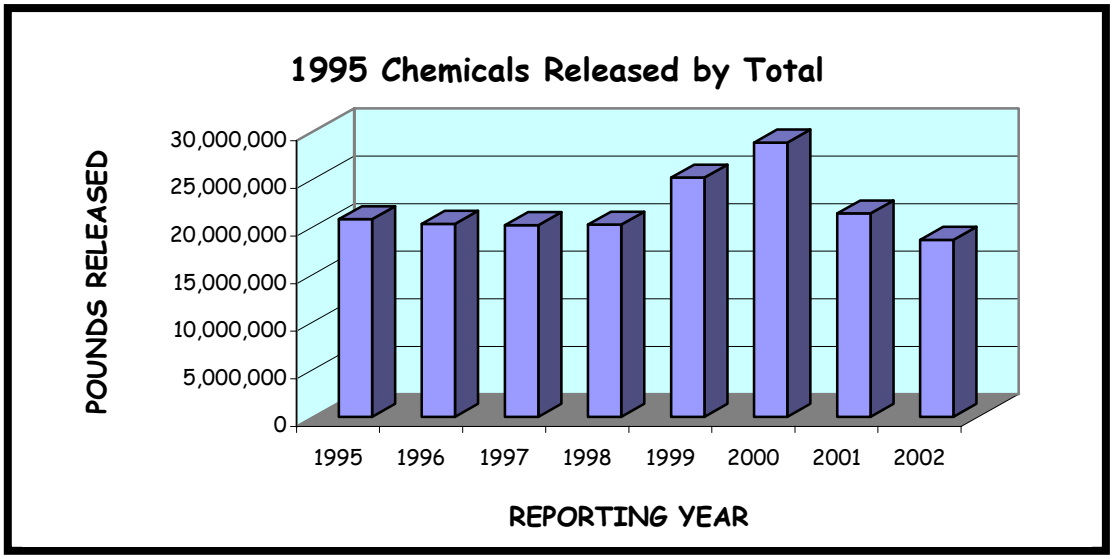


Figure 9a–1995 Chemicals Released by Total. The proceeding table shows trend data for the 1995 Chemicals from 1995-2002. The data is comprised of totals pounds released to air, water, land, and underground injection.

1995 Chemicals Released by Media (in Pounds)								
	1995	1996	1997	1998	1999	2000	2001	2002
Air	5,168,875	4,458,355	4,554,156	5,470,149	5,029,876	5,446,112	4,517,281	4,591,078
Water	7,983,034	8,799,107	8,821,592	7,738,583	13,758,533	11,068,562	9,833,215	9,616,792
Land	66,699	40,869	1,083	943,529	503,633	655,139	879,827	724,086
Injection	7,527,099	6,954,387	6,754,839	6,019,117	5,821,700	11,624,765	6,122,794	3,640,731

Figure 9b–1995 Chemicals Released by Media (in Pounds). The values for each year (in pounds) are speciated by media.

2.4 Industry Sectors

According to the mandates of EPCRA Section 313, only specified industry sectors must report to the Toxics Release Inventory. The industry sectors are categorized by their Standard Industrial Classification (SIC) Code summarized in Figure 10. At the program inception, only the manufacturing sector was included in the reporting criteria. Through the years, EPA has recognized the need to include other industrial sources of toxic chemicals under the reporting criteria as well. For this reason, this report distinguishes between two sets of Industries: the Original Industries and the New Industries. For 2002, 18 different Industry SIC Codes submitted TRI reports in the state of Louisiana.

TRI Reporting Industries: Standard Industrial Classification (SIC) Codes	
SIC	**Industry Group**
10*	Metal mining (except for SIC codes 1011, 1081, and 1094)
12*	Coal mining (except for 1241 and extraction activities)
20	Food
21	Tobacco
22	Textiles
23	Apparel
24	Lumber and Wood
25	Furniture and Fixtures
26	Paper and Allied Products
27	Printing and Publishing
28	Chemicals and Allied Products
29	Petroleum Refining and Coal
30	Rubber and Plastics
31	Leather
32	Stone, Clay, and Glass
33	Primary Metal
34	Fabricated Metals
35	Machinery (excluding electrical) and Computer Equipment
36	Electrical and Electronic Equipment
37	Transportation Equipment
38	Instruments
39	Miscellaneous Manufacturing
4911*, 4931*, 4939*	Electrical utilities that combust coal and/or oil
4953*	Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste treatment and disposal facilities
5169*	Chemicals and allied products wholesale distributors
5171*	Petroleum bulk plants and terminals
7389*	Solvent recovery services

Figure 10-TRI Reporting Industries: Standard Industrial Classification (SIC) Codes. The **Standard Industrial Classification (SIC) Codes** required to report to the Toxics Release Inventory are described in this chart.

** Indicates New Industries reporting to TRI as of 1998*

The **Original Industries** are the initial manufacturing sectors that have been reporting to TRI since 1987. As in previous years, SIC code 28 (Chemical and Allied Products Manufacturing) is the predominant reporting sector in Louisiana. Approximately 36% of all facilities reported under this sector, to which 61% of all TRI releases are attributed. The next two original industry sectors, SIC code 26 (Paper) and SIC code 29 (Petroleum and Coal) released 19.2 million pounds (16% of total releases) and 3.4 million pounds (3% of total releases), respectively. Based on total number of facilities, the top three sectors are, SIC codes 28 (Chemicals and Allied Products), 34 (Fabricated Metals), and 24 (Lumber and Wood Products), respectively.

Original Industries — Releases for 2002 (in Pounds)

SIC	Rank	# Facilities	Air	Water	Land	Injection	Total (by SIC)
20	5	14	551,365	1,582,596	0	0	2,133,961
24	6	28	642,323	385	4,309	0	647,016
25	15	1	2,189	0	0	0	2,189
26	2	13	14,758,201	1,064,280	3,354,052	0	19,176,532
27	16	2	250	0	0	0	250
28	1	136	32,308,217	5,801,672	5,292,844	30,793,590	74,196,323
29	4	26	2,975,334	373,262	2,827	712	3,352,135
30	9	12	329,761	3	0	0	329,764
32	14	7	1,699	0	672	0	2,371
33	10	12	114,591	61,127	112,705	0	288,423
34	8	31	320,041	1,754	115,895	0	437,690
35	11	7	46,898	3	0	0	46,901
36	12	4	44,566	99	0	0	44,665
37	7	17	534,776	30	75,430	0	610,236
38	17	1	20	108	0	0	128
TOTAL (by Media)		**311**	**52,630,231**	**8,885,319**	**8,958,734**	**30,794,302**	**101,268,584**

Figure 11-Original Industries—Releases for 2002 (in Pounds). This chart displays the SIC codes for the original industries, the rank of each sector (when its total releases were compared to the releases of all other sectors), the number of facilities reporting to each sector, the releases to air, water, land and underground injection, media totals, and a release total for each sector.

The **New Industries** category represents new facilities that reported for the first time in 1998, based on their Standard Industrial Classification Codes. The new SIC codes reported in Louisiana are 4911 (Electric Generators), 4953 (Commercial Disposal Facilities), 5169 (Chemical and Allied Products), 5171 (Petroleum Bulk Stations and Terminals), and 7389 (Solvent Recovery Services). In 2002, New Industries reported total releases of 12,172,290 pounds. The New SIC total releases were 10% of all TRI releases, which represents an overall decrease in releases as compared to 2001 where New SIC's were 15% of all TRI releases. There was a 33% (5,952,836 pounds) decrease for New SIC total releases from 2001-2002. For reporting year 2002, air releases were 12% (1,437,069 pounds) of the New SIC releases; water releases were 0.5% (63,334 pounds); land releases were 74% (9,005,083 pounds), and underground injection releases were 14% (1,666,804 pounds).

New Industries — Releases for 2002 (in Pounds)

New SIC	Rank	# Facilities	Air	Water	Land	Injection	Total (by SIC)
4911, 4953	3	7	1,371,362	63,327	9,005,083	1,666,804	12,106,576
5169, 5171	13	33	65,706	7	0	0	65,713
7389*	18	1	1	0	0	0	1
Total (by Media)	**36**	**41**	**1,437,069**	**63,334**	**9,005,083**	**1,666,804**	**12,172,290**

Figure 12-New Industries—Releases for 2002 (in Pounds). The chart displays each new SIC code, its contribution to air, water, land, and underground injection releases, totals for all new SIC's by media, and a grand total for all **New SIC** releases.

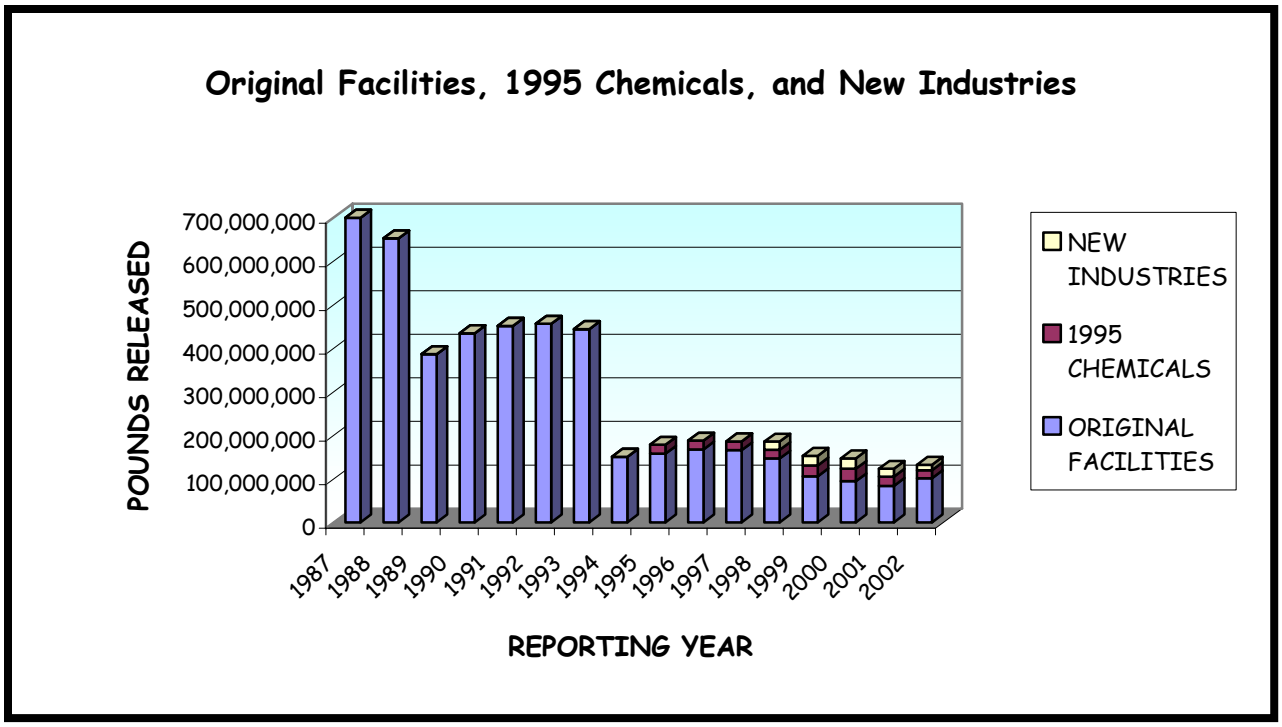


Figure 13 - *Original Facilities, 1995 Chemicals, and New Industries*. This graph shows trend data for the TRI Original Facilities, 1995 Chemicals, and New Industries, and their contribution to TRI total releases. Data includes releases to air, water, land, and underground injection.

2.5 Total Releases

Figure 14 - 2002 Top 25 Facilities Ranked by Total Releases (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
1	CYTEC INDUSTRIES, INC.	JEFFERSON	9,252,895
2	CF INDUSTRIES, INC.	ASCENSION	7,717,617
3	MONSANTO COMPANY	ST. CHARLES	7,584,858
4	ANGUS CHEMICAL COMPANY	OUACHITA	7,398,978
5	INTERNATIONAL PAPER, MANSFIELD	DE SOTO	6,460,520
6	RUBICON, INC.	ASCENSION	5,172,528
7	CHEMICAL WASTE MANAGEMENT	CALCASIEU	4,102,365
8	LOUISIANA PIGMENT COMPANY L.P.	CALCASIEU	3,522,324
9	CLECO CORPORATION - DOLET HILLS	DE SOTO	3,333,076
10	EXXON MOBIL BATON ROUGE REFINERY	EAST BATON ROUGE	2,693,922
11	TRIAD NITROGEN, INC.	ASCENSION	2,592,690
12	BIG CAJUN 2	POINTE COUPEE	2,412,129
13	CROMPTON MANUFACTURING - GEISMAR	ASCENSION	2,396,138
14	INTERNATIONAL PAPER - LA MILL	MOREHOUSE	2,378,555
15	BOISE CASCADE CORPORATION	BEAUREGARD	1,988,899
16	EXXONMOBIL CHEMICAL COMPANY	EAST BATON ROUGE	1,967,809
17	BASF CORPORATION	ASCENSION	1,961,533
18	GAYLORD CONTAINER CORPORATION	WASHINGTON	1,834,423
19	IMC PHOSPHATES - FAUSTINA	ST. JAMES	1,693,754
20	THE DOW CHEMICAL COMPANY	IBERVILLE	1,691,776
21	CLEAN HARBORS PLAQUEMINE, L.L.C.	IBERVILLE	1,631,538
22	FIRESTONE POLYMERS	CALCASIEU	1,590,619
23	HONEYWELL INTERNATIONAL, INC.	EAST BATON ROUGE	1,500,762
24	CITGO PETROLEUM CORPORATION	CALCASIEU	1,442,826
25	PCS NITROGEN FERTILIZER, L.P.	ASCENSION	1,425,420

Figure 15 - 2002 Parish Ranking by Total Releases (in Pounds)

RANK	PARISH	# FACILITIES	TOTAL
1	ASCENSION	20	23,378,291
2	CALCASIEU	31	14,719,376
3	ST. CHARLES	21	12,061,080
4	DE SOTO	7	9,795,836
5	JEFFERSON	23	9,561,845
6	OUACHITA	12	8,991,111
7	EAST BATON ROUGE	21	8,541,503
8	IBERVILLE	17	5,447,577
9	ST. JAMES	8	4,605,273
10	POINTE COUPEE	3	2,413,464
11	MOREHOUSE	1	2,378,553
12	BEAUREGARD	4	2,053,141
13	WASHINGTON	2	1,834,425
14	ST. BERNARD	2	1,803,930
15	NATCHITOCHES	6	1,649,083
16	CADDO	23	1,579,498
17	RAPIDES	12	1,525,177
18	WEST BATON ROUGE	15	1,393,846
19	ST. JOHN THE BAPTIST	11	1,251,097
20	JACKSON	1	1,193,255
21	UNION	2	959,497
22	WEST FELICIANA	1	786,057
23	PLAQUEMINES	10	605,179
24	VERNON	2	393,076
25	TANGIPAHOA	5	389,141
26	LINCOLN	8	308,230
27	ST. MARY	6	245,409
28	ORLEANS	7	220,612
29	IBERIA	8	144,400
30	EVANGELINE	2	130,388
31	LIVINGSTON	6	127,875
32	ST. LANDRY	4	105,245
33	WEBSTER	3	85,090
34	ASSUMPTION	3	76,898
35	TERREBONNE	3	72,992
36	CAMERON	3	61,948
37	WINN	2	50,830
38	LAFOURCHE	7	50,687
39	ST. MARTIN	2	44,250
40	SABINE	5	39,211
41	LA SALLE	1	32,239
42	VERMILION	3	18,624
43	LAFAYETTE	13	13,031
44	ST. TAMMANY	5	6,027
45	MADISON	2	5,745
46	FRANKLIN	1	3,854
47	ST. HELENA	1	3,056
48	ACADIA	3	2,523
49	BOSSIER	6	1,730
50	ALLEN	2	1,249
51	BIENVILLE	3	576
52	RICHLAND	1	272
53	AVOYELLES	2	30
54*	RED RIVER	1	26

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.6 Air Releases

Figure 16 - 2002 Top 25 Facilities Ranked by Air Releases (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
1	CF INDUSTRIES, INC.	ASCENSION	6,798,728
2	INTERNATIONAL PAPER, MANSFIELD	DE SOTO	4,205,313
3	TRIAD NITROGEN, INC.	ASCENSION	2,554,665
4	EXXONMOBIL CHEMICAL COMPANY	EAST BATON ROUGE	1,820,308
5	BOISE CASCADE CORPORATION	BEAUREGARD	1,791,681
6	INTERNATIONAL PAPER - LA MILL	MOREHOUSE	1,782,651
7	GAYLORD CONTAINER CORPORATION	WASHINGTON	1,760,094
8	IMC PHOSPHATES - FAUSTINA	ST. JAMES	1,656,647
9	FIRESTONE POLYMERS	CALCASIEU	1,590,619
10	HONEYWELL INTERNATIONAL, INC.	EAST BATON ROUGE	1,483,754
11	CITGO PETROLEUM CORPORATION	CALCASIEU	1,330,628
12	THE DOW CHEMICAL COMPANY	IBERVILLE	1,279,205
13	STONE CONTAINER CORPORATION	JACKSON	1,173,394
14	CHALMETTE REFINING, L.L.C.	ST. BERNARD	1,161,522
15	EXXON MOBIL BATON ROUGE REFINERY	EAST BATON ROUGE	1,125,218
16	RIVERWOOD INTERNATIONAL	OUACHITA	1,001,922
17	INTERNATIONAL PAPER	RAPIDES	999,628
18	EXXON CHEMICAL COMPANY	EAST BATON ROUGE	938,401
19	WILLAMETTE INDUSTRIES, INC.	NATCHITOCHES	872,312
20	CROMPTON MANUFACTURING - GEISMAR	ASCENSION	872,164
21	MOTIVA ENTERPRISES, L.L.C. - CONVENT	ST. JAMES	848,286
22	UNION CARBIDE CORPORATION	ST. CHARLES	835,218
23	PCS NITROGEN FERTILIZER, L.P.	ASCENSION	748,599
24	BIG CAJUN 2	POINTE COUPEE	737,550
25	SHELL NORCO CHEMICAL PLANT - EAST SITE	ST. CHARLES	730,152

Figure 17 - 2002 Parish Ranking by Air Releases (in Pounds)

RANK	PARISH	# FACILITIES	TOTAL
1	ASCENSION	20	13,985,189
2	EAST BATON ROUGE	21	6,388,966
3	CALCASIEU	31	6,308,478
4	DE SOTO	7	4,476,845
5	ST. CHARLES	21	3,589,545
6	ST. JAMES	8	2,892,469
7	IBERVILLE	17	2,336,771
8	BEAUREGARD	4	1,852,411
9	MOREHOUSE	1	1,782,650
10	WASHINGTON	2	1,760,096
11	ST. BERNARD	2	1,488,180
12	WEST BATON ROUGE	15	1,349,127
13	OUACHITA	12	1,334,486
14	JACKSON	1	1,173,393
15	RAPIDES	12	1,141,492
16	CADDO	23	1,095,490
17	NATCHITOCHES	6	873,625
18	POINTE COUPEE	3	738,885
19	ST. JOHN THE BAPTIST	11	731,790
20	JEFFERSON	23	702,201
21	WEST FELICIANA	1	588,146
22	PLAQUEMINES	10	569,916
23	LINCOLN	8	308,230
24	ST. MARY	6	245,387
25	ORLEANS	7	203,019
26	TANGIPAHOA	5	174,338
27	IBERIA	8	144,292
28	EVANGELINE	2	130,387
29	UNION	2	98,023
30	WEBSTER	3	85,090
31	ST. LANDRY	4	76,009
32	TERREBONNE	3	72,992
33	ASSUMPTION	3	70,898
34	CAMERON	3	61,948
35	LIVINGSTON	6	60,997
36	WINN	2	50,575
37	ST. MARTIN	2	44,250
38	SABINE	5	39,182
39	LAFOURCHE	7	36,277
40	LA SALLE	1	31,888
41	VERMILION	3	18,624
42	LAFAYETTE	13	13,028
43	ST. TAMMANY	5	5,997
44	MADISON	2	4,300
45	ST. HELENA	1	3,046
46	ACADIA	3	2,523
47	VERNON	2	1,373
48	ALLEN	2	1,219
49	BOSSIER	6	820
50	FRANKLIN	1	800
51	BIENVILLE	3	571
52	RICHLAND	1	262
53	RED RIVER	1	26
54*	AVOYELLES	2	15

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.7 Water Releases

Figure 18- 2002 Top 25 Facilities Ranked by Water Releases (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
1	EXXON MOBIL BATON ROUGE REFINERY	EAST BATON ROUGE	1,568,668
2	BASF CORPORATION	ASCENSION	1,328,118
3	CF INDUSTRIES, INC.	ASCENSION	918,889
4	CONAGRA BROILER COMPANY	UNION	861,474
5	SYNGENTA CROP PROTECTION, INC.	IBERVILLE	803,922
6	PCS NITROGEN FERTILIZER, L.P.	ASCENSION	643,082
7	CONAGRA BROILER COMPANY	NATCHITOCHES	511,273
8	ANGUS CHEMICAL COMPANY	OUACHITA	435,920
9	US DOD US ARMY JRTC	VERNON	292,406
10	INTERNATIONAL PAPER, MANSFIELD	DE SOTO	280,974
11	MOTIVA ENTERPRISES, L.L.C. - CONVENT	ST. JAMES	278,020
12	CHALMETTE REFINING, L.L.C.	ST. BERNARD	254,666
13	GEORGIA GULF CORPORATION	IBERVILLE	244,540
14	CONOCOPHILLIPS LAKE CHARLES	CALCASIEU	240,382
15	LYONDELL CHEMICAL	CALCASIEU	230,534
16	SANDERSON FARMS, INC.	TANGIPAHOA	209,730
17	GEORGIA PACIFIC CORPORATION - PORT HUDSON	EAST BATON ROUGE	190,686
18	INTERNATIONAL PAPER - LA MILL	MOREHOUSE	185,353
19	UNION CARBIDE CORPORATION	ST. CHARLES	182,445
20	MONSANTO COMPANY	ST. CHARLES	156,040
21	EXXONMOBIL CHEMICAL COMPANY	EAST BATON ROUGE	147,501
22	SHELL CHEMICAL COMPANY	ASCENSION	138,300
23	PPG INDUSTRIES, INC.	CALCASIEU	134,545
24	INTERNATIONAL PAPER	RAPIDES	132,108
25	THE DOW CHEMICAL COMPANY	IBERVILLE	131,922

Figure 19 - 2002 Parish Ranking by Water Releases (in Pounds)			
RANK	PARISH	# FACILITIES	TOTAL
1	ASCENSION	20	3,091,224
2	EAST BATON ROUGE	21	1,955,658
3	IBERVILLE	17	1,210,441
4	UNION	2	861,474
5	CALCASIEU	31	771,911
6	NATCHITOCHES	6	521,216
7	OUACHITA	12	461,108
8	ST. JAMES	8	381,776
9	ST. CHARLES	21	376,116
10	ST. BERNARD	2	315,735
11	DE SOTO	7	310,782
12	VERNON	2	292,406
13	TANGIPAHOA	5	209,730
14	MOREHOUSE	1	185,353
15	RAPIDES	12	142,895
16	WEST FELICIANA	1	89,878
17	ST. JOHN THE BAPTIST	11	83,220
18	WASHINGTON	2	74,329
19	BEAUREGARD	4	59,251
20	PLAQUEMINES	10	32,459
21	ST. LANDRY	4	28,841
22	JEFFERSON	23	22,401
23	JACKSON	1	19,862
24	WEST BATON ROUGE	15	9,060
25	POINTE COUPEE	3	4,000
26	ORLEANS	7	3,315
27	MADISON	2	1,445
28	LAFOURCHE	7	1,000
29	CADDO	23	893
30	LIVINGSTON	6	669
31	WINN	2	255
32	BOSSIER	6	198
33	LA SALLE	1	154
34	IBERIA	8	108
35	ST. TAMMANY	5	30
36	AVOYELLES	2	15
37	RICHLAND	1	10
38	ST. HELENA	1	10
39	BIENVILLE	3	5
40	ST. MARY	6	4
41	LAFAYETTE	13	3
42*	EVANGELINE	2	1

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.8 Land Releases

Figure 20 - 2002 Top 25 Facilities Ranked by Releases to Land (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
1	CHEMICAL WASTE MANAGEMENT	CALCASIEU	4,099,354
2	LOUISIANA PIGMENT COMPANY, L.P.	CALCASIEU	3,494,512
3	CLECO CORPORATION - DOLET HILLS	DE SOTO	3,033,825
4	INTERNATIONAL PAPER, MANSFIELD	DE SOTO	1,974,232
5	BIG CAJUN 2	POINTE COUPEE	1,670,579
6	KAISER ALUMINUM AND CHEMICAL	ST. JAMES	1,327,599
7	INTERNATIONAL PAPER - LA MILL	MOREHOUSE	410,551
8	RIVERWOOD INTERNATIONAL	OUACHITA	340,916
9	THE DOW CHEMICAL COMPANY	IBERVILLE	280,649
10	WILLAMETTE INDUSTRIES, INC.	NATCHITOCHES	250,345
11	RODEMACHER POWER STATION	RAPIDES	201,329
12	BOISE CASCADE CORPORATION	BEAUREGARD	139,814
13	VULCAN MATERIALS COMPANY	ASCENSION	131,626
14	TEMBEC USA, L.L.C.	WEST FELICIANA	108,033
15	EXIDE CORPORATION - BR SMELTER	EAST BATON ROUGE	106,030
16	US DOD US ARMY JRTC	VERNON	99,297
17	GEORGIA PACIFIC CORPORATION - PORT HUDSON	EAST BATON ROUGE	90,312
18	SHAW SUNLAND FABRICATORS, INC.	LIVINGSTON	66,209
19	BOLLINGER CALCASIEU, L.L.C.	CALCASIEU	44,900
20	INTERNATIONAL PAPER	RAPIDES	39,461
21	PCS NITROGEN FERTILIZER, L.P.	ASCENSION	33,739
22	SHAW PROCESS FABRICATORS	OUACHITA	24,428
23	DSM COPOLYMER, INC.	WEST BATON ROUGE	20,423
24	SHAW SSS FABRICATORS, INC.	WEST BATON ROUGE	15,236
25	BOLLINGER GULF REPAIR, L.L.C.	ORLEANS	14,217

Figure 21 - 2002 Parish Ranking by Land Releases (in Pounds)			
RANK	PARISH	# FACILITIES	TOTAL
1	CALCASIEU	31	7,638,987
2	DE SOTO	7	5,008,210
3	POINTE COUPEE	3	1,670,579
4	ST. JAMES	8	1,331,028
5	MOREHOUSE	1	410,551
6	OUACHITA	12	373,281
7	IBERVILLE	17	268,577
8	NATCHITOCHES	6	254,243
9	RAPIDES	12	240,790
10	EAST BATON ROUGE	21	196,879
11	ASCENSION	20	166,951
12	BEAUREGARD	4	141,479
13	WEST FELICIANA	1	108,033
14	VERNON	2	99,297
15	LIVINGSTON	6	66,209
16	WEST BATON ROUGE	15	35,659
17	ORLEANS	7	14,278
18	LAFOURCHE	7	13,410
19	JEFFERSON	23	8,200
20	ASSUMPTION	3	6,000
21	ST. CHARLES	21	5,373
22	TANGIPAHOA	5	5,073
23	CADDO	23	4,765
24	FRANKLIN	1	3,054
25	ST. LANDRY	4	394
26	PLAQUEMINES	10	241
27	LA SALLE	1	197
28	ALLEN	2	30
29	SABINE	5	29
30	ST. MARY	6	19
31*	ST. BERNARD	2	15

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.9 Underground Injection Releases

Figure 22 – 2002 Facilities Ranked by Releases to Underground Injection (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
1	CYTEC INDUSTRIES, INC.	JEFFERSON	8,829,043
2	MONSANTO COMPANY	ST. CHARLES	7,322,980
3	ANGUS CHEMICAL COMPANY	OUACHITA	6,822,236
4	RUBICON, INC.	ASCENSION	4,610,917
5	CLEAN HARBORS PLAQUEMINE, L.L.C.	IBERVILLE	1,631,450
6	CROMPTON MANUFACTURING - GEISMAR	ASCENSION	1,523,974
7	UOP - SHREVEPORT PLANT	CADDO	478,350
8	CROMPTOM CORPORATION TAFT FACILITY	ST. CHARLES	436,066
9	DU PONT PONTCHARTRAIN WORKS	ST. JOHN THE BAPTIST	411,857
10	OCCIDENTAL CHEMICAL CORPORATION	ST. CHARLES	331,000
11	DUPONT DOW ELASTOMERS, L.L.C.	ST. JOHN THE BAPTIST	24,230
12	CHEVRON ORONITE CORPORATION	PLAQUEMINES	2,563
13	CALUMET LUBRICANTS COMPANY	BOSSIER	712
14	SYNGENTA CROP PROTECTION, INC.	IBERVILLE	338
15	BASF CORPORATION	ASCENSION	36

Figure 23 – 2002 Parish Ranking by Underground Injection Releases (in Pounds)			
RANK	PARISH	# FACILITIES	TOTAL
1	JEFFERSON	23	8,829,043
2	ST. CHARLES	21	8,090,046
3	OUACHITA	12	6,822,236
4	ASCENSION	20	6,134,927
5	IBERVILLE	17	1,631,788
6	CADDO	23	478,350
7	ST. JOHN THE BAPTIST	11	436,087
8	PLAQUEMINES	10	2,563
9	BOSSIER	6	712

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.10 The Top 10 Chemicals

The top 10 chemicals reported in Louisiana for 2002 are presented in Figure 24 below. As presented in the table, the top three chemicals reported were ammonia, methanol, and nitrate compounds. Together, these three chemicals represented 37% (45 million pounds) of all chemicals reported for 2002.

Ammonia was reported by 73 facilities, for a total of approximately 19 million pounds. Seventy-five percent of the ammonia reported was released to air. Ammonia is primarily released by the fertilizer industry. CF Industries, Triad Nitrogen, and Cytec Industries account for approximately 71% (13.5 million pounds) of the total ammonia releases reported to TRI.

Methanol was reported by 93 facilities, for a total of about 15 million pounds. Eighty-two percent of methanol reported was released to the air. The pulpwood and paper industry is the primary producers of methanol. The top methanol releases came from International Paper in Mansfield, Boise Cascade in DeRidder, and Gaylord Container Corporation in Bogalusa. These facilities account for approximately 41% (6.3 million pounds) of the total methanol released in the state.

Nitrate compounds were reported by 46 facilities for total releases of approximately 11 million pounds, with 87% of the total released to water. Unlike ammonia and methanol, this chemical category is not dominated by a particular industry sector. However, this year's top three emitters of nitrate compounds are Exxon Mobil Baton Rouge Refinery, BASF Corporation, and ConAgra Broiler Company. These facilities account for 8% (3.7 million pounds) of nitrate compounds emissions.

Top 10 Chemicals Reported In 2002 (in Pounds)

RANK	CHEMICAL	AIR	WATER	LAND	INJECTION	TOTAL	# FACILITIES
1	AMMONIA	14,299,092	651,775	4,607	4,115,225	19,070,699	73
2	METHANOL	12,497,291	410,509	320,214	1,978,441	15,206,455	93
3	NITRATE COMPOUNDS	0	9,606,880	82,410	1,405,994	11,095,284	46
4	FORMALDEHYDE	366,932	26,812	1,913	7,356,799	7,752,456	36
5	MANGANESE	44,166	341,141	5,089,655	0	5,474,962	35
6	n-HEXANE	4,367,912	530	254	36,896	4,405,592	48
7	NITRIC ACID	111,351	5	6,900	4,165,430	4,283,686	19
8	BARIUM COMPOUNDS	86,011	45,085	3,612,254	593	3,743,943	17
9	ETHYLENE	3,624,333	0	0	0	3,624,333	47
10	ZINC COMPOUNDS	149,131	67,278	3,025,316	706	3,242,431	77

Figure 24-Top 10 Chemicals Reported in 2002. This chart illustrates the ten most abundant chemicals in 2002. The rank of the chemicals, the pounds released to the various media, and the number of facilities reporting those chemicals are shown.

2.11 Special Interest Chemicals

In previous TRI reports, general chemical and health information have been provided for selected chemicals of special interest. Chapter 5 ("Chemicals in the News") has replaced this section. As a public information tool, Chapter 5 not only provides health information, but also related outreach programs and public awareness topics specific to Louisiana. The chemicals featured in this section of previous reports are listed in Table 3 of the Appendix.

2.12 PBT Chemicals and Dioxins

PBT Chemicals. PBT chemicals are a class of chemicals that are persistent, bioaccumulative, and toxic. These chemicals persist in the environment and accumulate in biological tissue over long periods of time. Chemicals with these characteristics may pose potential risks to human health and the environment. Thus, for reporting year 2000, EPA lowered the PBT reporting threshold to 100 pounds, 10 pounds, or 0.1 grams (depending on the chemical). This lower threshold would ensure that the public had access to important information about the quantities of these chemicals entering their communities.

Since 2000, PBT releases have decreased by 59% and by 51% since last year's report. In 2002, 43% of PBT's were released to air; 4% to water; 22% to land; and 32% to underground injection.

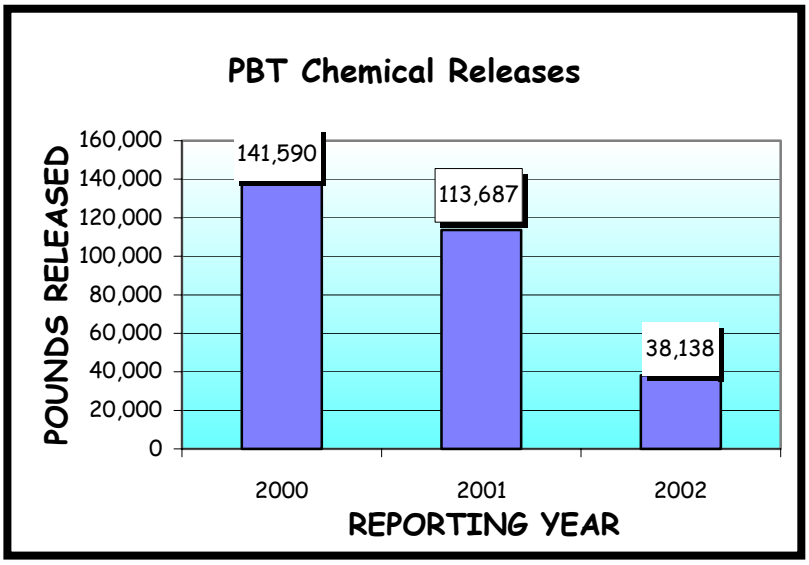


Figure 25-PBT Chemicals Released. This graph shows PBT releases from 2000 to 2002 (in pounds). To maintain consistency, this data accounts only for the PBT chemicals initially designated by the EPA.

Lead and lead compounds were added to the list of PBT chemicals for reporting year 2001. The data dynamically changed the trends for PBT's and is therefore, graphed separately in Figure 27 below. Although lead/lead compounds were not a PBT in 2000, the data is included for comparison.

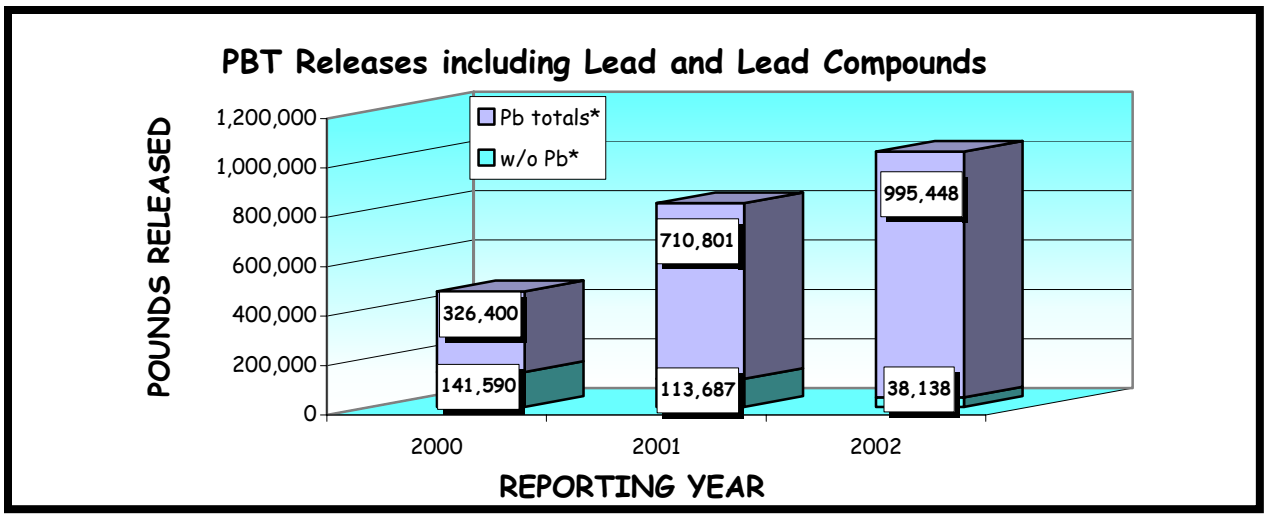


Figure 26-PBT Releases including Lead and Lead Compounds. When lead/lead compounds are included in PBT totals, the trend increases from 2000 to 2002. (* - Pb = Lead and Lead Compounds)

Dioxin and Dioxin-like Compounds. Reporting year 2000 was also the first year that facilities reported dioxin and dioxin-like compounds. Dioxins are a family of 75 chemicals commonly called chlorinated dioxins. TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin) is the most toxic chemical in this group. Although Dioxins occur in small amounts in the environment by natural phenomena such as forest fires and volcanoes, most present-day levels of dioxins were released by anthropogenic sources. Dioxins are released as a by-product of certain industrial processes (pulp/paper bleaching, chemical manufacturing) and also through the incineration of municipal waste, the burning of fuels (i.e., wood, coal, leaded gasoline), and improper disposal of hazardous waste. Dioxins can cause skin damage, and long-term exposure to TCDD has caused cancer and birth defects in laboratory animals. The threshold limit for dioxins is 0.1 grams.

Total dioxin releases have decreased since 2000 as indicated in the graph below. There was a 71% decrease in total dioxin releases from 2001 to 2002; 1,608 grams (3.545 pounds) were reported for 2001 and 463 grams (1.02 pounds) for 2002. For 2002, air releases were 22% of the total dioxins released, water releases were 68%, land releases were 9%, and injection releases were less than 0.1%. Please note that Dioxin totals are in grams, NOT pounds.

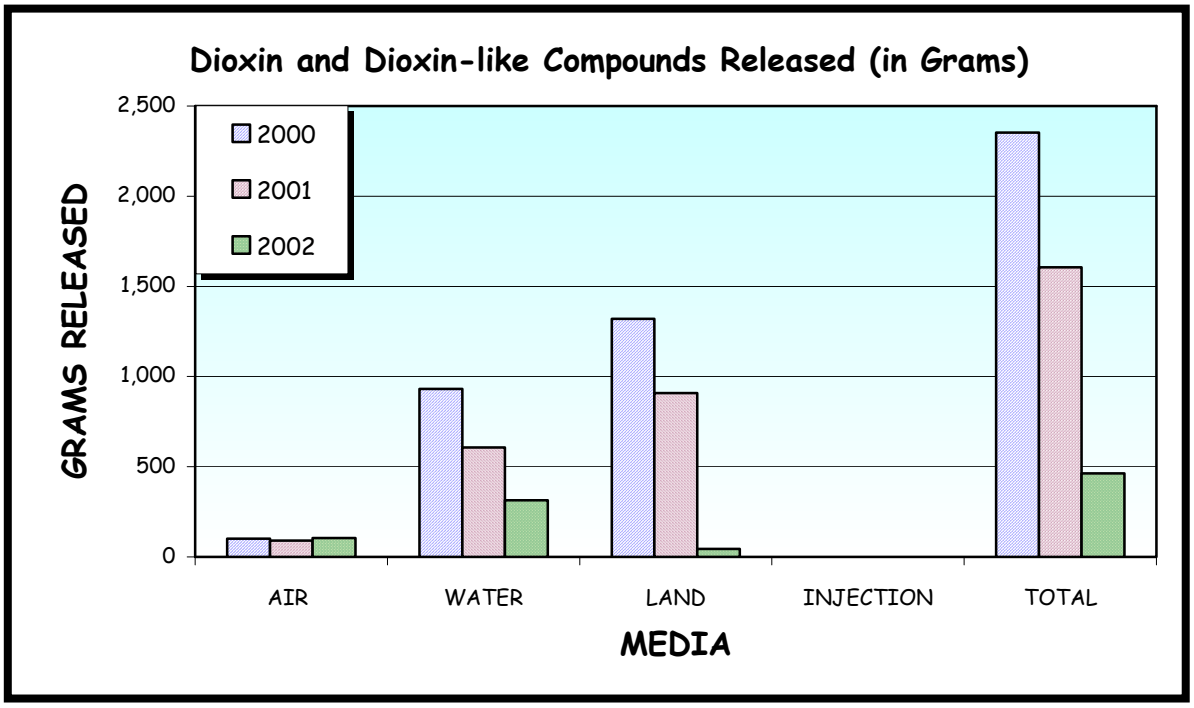


Figure 27-Dioxin and Dioxin-like Compounds Released (in Grams). This graph shows dioxin releases from 2000-2002 for air, water, land, underground injection, as well as the overall total.

2002 Top 15 Facilities by Dioxin Releases (in Grams)			
RANK	FACILITY	PARISH	TOTAL
1	THE DOW CHEMICAL COMPANY	IBERVILLE	285.64
2	FORMOSA PLASTICS CORPORATION	EAST BATON ROUGE	60.00
3	DIS - TRAN PRODUCTS, INC.	RAPIDES	27.00
4	OCCIDENTAL CHEMICAL CORPORATION	ST. CHARLES	19.00
5	PPG INDUSTRIES, INC.	CALCASIEU	13.96
6	GEORGIA - PACIFIC CORPORATION	EAST BATON ROUGE	7.93
7	LOUISIANA PIGMENT COMPANY, L.P.	CALCASIEU	7.72
8	INTERNATIONAL PAPER	DE SOTO	4.13
9	CHEMICAL WASTE MANAGEMENT	CALCASIEU	4.10
10	GEISMAR VINYLS COMPANY	ASCENSION	3.43
11	GEORGIA GULF CORPORATION	IBERVILLE	3.17
12	COLFAX TREATING COMPANY	RAPIDES	3.10
13	RESOLUTION PERFORMANCE PRODUCTS	ST. CHARLES	2.73
14	BOISE CASCADE CORPORATION	BEAUREGARD	1.68
15	GAYLORD CONTAINER CORPORATION	WASHINGTON	1.40

Figure 28-Top 15 Facilities by Dioxin Total Releases (in Grams). According to this table, The Dow Chemical Company in Iberville Parish has the highest release of dioxin/dioxin-like compounds.

2002 Parish Rank by Dioxin Total Releases (in Grams)			
RANK	PARISH	# FACILITIES	TOTAL
1	IBERVILLE	3	288.8394
2	EAST BATON ROUGE	7	69.628887
3	RAPIDES	4	30.75
4	CALCASIEU	10	30.073535
5	ST. CHARLES	6	22.336
6	DE SOTO	2	4.5157
7	ASCENSION	4	4.34341
8	BEAUREGARD	2	1.9266
9	WASHINGTON	1	1.4
10	MOREHOUSE	1	1.3366
11	WEST FELICIANA	1	1.1404
12	OUACHITA	1	1.01
13	ST. JOHN THE BAPTIST	2	0.9157
14	NATCHITOCHES	2	0.9004
15	POINTE COUPEE	1	0.88
16	ST. JAMES	1	0.76799
17	JACKSON	1	0.761
18	ST. BERNARD	2	0.4972
19	ST. LANDRY	1	0.24
20	LA SALLE	1	0.1684
21	WEBSTER	1	0.1435
22	RED RIVER	1	0.1356
23	ALLEN	1	0.1298
24	SABINE	1	0.1274
25*	LINCOLN	1	0.1028

Figure 29-Parish Rank by Dioxin Total Releases (in Grams). The table above shows Louisiana parishes ranked by total dioxin releases (air, water, land, injection included). The number of dioxin-reporting facilities in each parish is also listed. (*There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.)

2.13 Waste Management

In addition to release information, TRI data includes information on how reporting facilities manage production-related waste. Waste management activities, which occur on-site and off-site, can be categorized as one of the following: recycling, energy recovery, waste treatment, publicly owned treatment works (POTWs), or disposal. Although a disposal is considered to be an off-site transfer, it is reported as a release and is therefore, presented with the release information in Section 2.1.

This section will summarize the remaining waste management activities. In 2002, a total of 2.4 billion pounds of production-related waste were managed by facilities, with over 92% of waste management activities occurring on-site. An additional two million pounds were due to non-production related events.

Waste Management Summary			
Section 8 Activities		*2001*	*2002*
QUANTITY RELEASED		127,767,292	127,021,256
ON-SITE	Energy Recovery	308,657,360	328,849,697
	Recycled	635,194,772	642,433,194
	Treatment	1,183,150,479	1,248,009,535
	TOTAL	2,127,002,611	2,219,292,426
OFF-SITE	Energy Recovery	15,718,141	16,523,254
	Recycled	35,017,391	39,315,154
	Treatment	34,670,778	24,862,092
	TOTAL	85,406,310	80,700,500
WASTE MANAGEMENT TOTAL		2,340,176,644	2,427,014,642
Non-Production Related		*651,901*	*2,076,357*

Figure 30-Waste Management Summary. This table indicates that more total waste was managed in 2002 than in 2001. The majority of waste produced by facilities was managed on-site (92%). Off-site represents 8% of total waste managed. Approximately two million pounds of non-production related waste was reported for 2002.

On-site Waste Management. On-site waste management activities are captured in Section 8 of the Form R, which also serves as a summary of TRI releases (including disposals). A total of 2.2 billion pounds of waste was managed on-site. Treatment was the primary waste management method, accounting for 56% of the on-site waste management total. Energy recovery was elected for 15% of the waste, and the remaining 29% was recycled. As compared to 2001, on-site recycling and treatment increased, but energy recovery on-site decreased (see Figure 30).

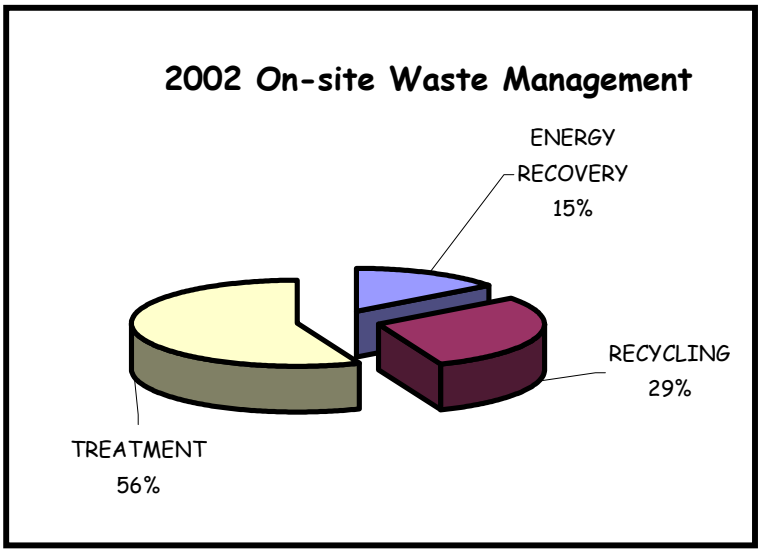


Figure 31-2002 On-site Waste Management. This figure shows the on-site waste management activities utilized by facilities in 2002.

Off-site Transfer. In 2002, approximately 82 million pounds of TRI chemicals were transferred off-site. This total included approximately 39 million pounds transferred for recycling, 17 million pounds transferred for energy recovery, 25 million pounds for waste treatment, and 360,000 pounds for POTWs. Off-site transfers accounted for 8% of all waste management activities. As compared to 2001, off-site treatment has decreased, while energy recovery and recycling have increased (see Figure 30).

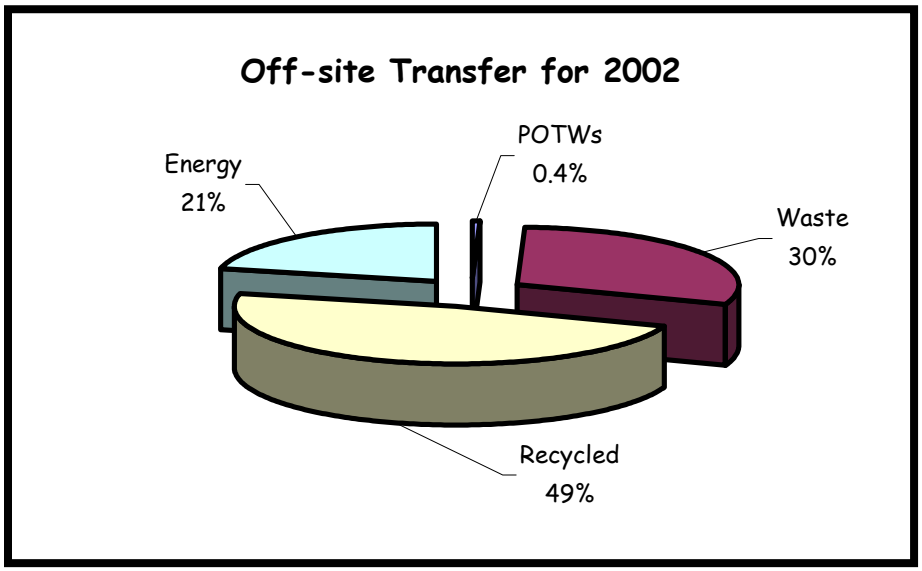


Figure 32-Off-site Transfers for 2002. Of the 82 million pounds transferred off-site, energy recovery accounted for 21%; 49% was recycled; and 30% was treated as waste. Transfers to POTWs were negligible. Disposals are included in the "Off-site release" data in Section 2.1.

Non-production Related Waste. Section 8 of the Form R also captures information on releases that result from unpredictable events. EPA describes these as remedial actions, catastrophic events (i.e., floods, hurricanes, tornadoes, etc.) or one-time events not associated with normal production processes. For 2002, two million pounds were released due to such events (see Figure 30 above).

FIGURE 33 - 2002 TRI Off-Site Transfers (in Pounds)

PARISH	# FACILITIES	POTWs	WASTE	RECYCLED	ENERGY	TOTAL
ACADIA	3	46	0	519	180,099	180,664
ALLEN	2	0	0	0	0	0
ASCENSION	20	0	5,800,919	609,100	7,998,621	14,408,640
ASSUMPTION	3	0	0	0	53,140	53,140
AVOYELLES	2	0	0	0	0	0
BEAUREGARD	4	5	5,000	0	518,530	523,535
BIENVILLE	3	210,928	0	0	0	210,928
BOSSIER	6	86	36,437	11,298	20	47,841
CADDO	23	42,396	4,300	8,621,761	25,724	8,694,181
CALCASIEU	31	0	1,538,179	18,544,807	4,179,233	24,262,219
CAMERON	3	0	0	0	0	0
CONCORDIA	1	0	0	0	0	0
DE SOTO	7	5	9,315	109,483	66,800	185,603
EAST BATON ROUGE	21	0	1,233,234	1,352,928	2,951,681	5,537,843
EAST CARROLL	1	0	0	0	0	0
EVANGELINE	2	0	0	273,301	0	273,301
FRANKLIN	1	0	0	0	0	0
GRANT	1	0	0	0	0	0
IBERIA	8	0	0	0	5,057	5,057
IBERVILLE	17	0	352,758	77,345	218,039	648,142
JACKSON	1	0	0	0	0	0
JEFFERSON	23	370	1,626	531,496	520,814	1,054,306
LA SALLE	1	0	0	0	0	0
LAFAYETTE	13	80	24,042	78,860	0	102,982
LAFOURCHE	7	0	0	756,150	1,230	757,380
LINCOLN	8	0	0	537,002	0	537,002
LIVINGSTON	6	0	2,489	15,718	79,119	97,326
MADISON	2	0	24,447	0	724	25,171
MOREHOUSE	1	0	0	0	0	0
NATCHITOCHES	6	22	0	6,812	0	6,834
ORLEANS	7	0	28,177	94,554	9,120	131,851
OUACHITA	12	65,363	37,935	176,064	1,948	281,310
PLAQUEMINES	10	0	14,979	480,644	140,414	636,037
POINTE COUPEE	3	0	0	0	0	0
RAPIDES	12	786	7,260	41,131	19,972	69,149
RED RIVER	1	0	0	0	0	0
RICHLAND	1	39,552	0	33,603	0	73,155
SABINE	5	0	0	0	0	0
ST. BERNARD	2	0	4,493	67,889	10,864	83,246
ST. CHARLES	21	0	13,729,773	1,472,757	204,229	15,406,759
ST. HELENA	1	0	217,656	0	0	217,656
ST. JAMES	8	0	860,995	581,244	683	1,442,922
ST. JOHN THE BAPTIST	11	0	65,073	3,640,451	0	3,705,524
ST. LANDRY	4	0	31,292	687	0	31,979
ST. MARTIN	2	0	0	0	0	0
ST. MARY	6	0	0	308,291	91	308,382
ST. TAMMANY	5	0	1,620	163,251	13,553	178,423
TANGIPAHOA	5	0	0	0	0	0
TERREBONNE	3	0	0	7,748	36,158	43,906
UNION	2	0	0	0	0	0
VERMILION	3	0	0	0	6,912	6,912
VERNON	2	0	0	0	0	0
WASHINGTON	2	0	296,034	0	177,000	473,034
WEBSTER	3	5	0	5,500	0	5,505
WEST BATON ROUGE	15	0	449,539	711,373	78,424	1,239,336

* There are 64 parishes in Louisiana. Only those parishes containing TRI facilities that report releases for this category are listed above.

2.14 Louisiana Industrial Corridors

Louisiana is a highly industrialized state with a large number of facilities concentrated in parishes along the Mississippi River (Mississippi River Industrial Corridor) and in Calcasieu Parish (Calcasieu Industrial Corridor). These two areas represent approximately 50% of all reporting facilities in the state. The Mississippi River Industrial Corridor (MRC) has 156 facilities (42%), and the Calcasieu Industrial Corridor (CIC) has 31 facilities (8%).

When Louisiana totals are compared to the Mississippi River Industrial Corridor totals, the MRC contributed 57% of the state's air releases, 64% of the state's water releases, 11% of the state's land releases, and 77% of the state's underground injection releases. In total releases, the MRC accounted for 56%.

The CIC contributed 11% of the state's releases to air, 7% of the state's water releases, and 42% of the state's land releases. There were no releases to underground injection by Calcasieu facilities. Total releases in the CIC were 12% of the state's total releases.

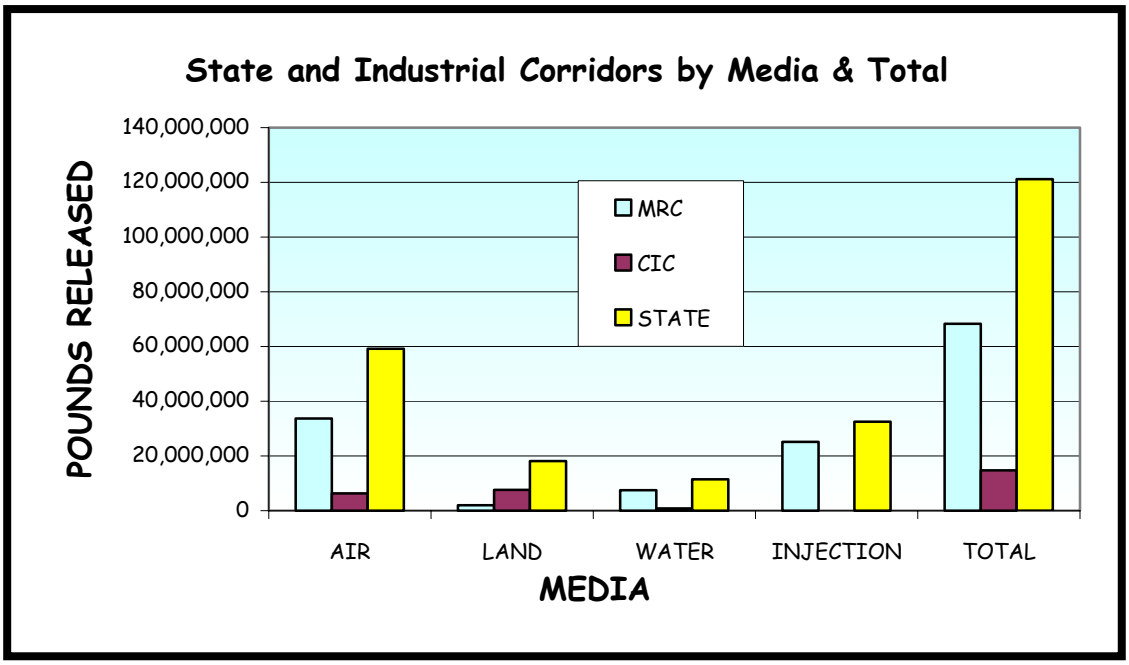


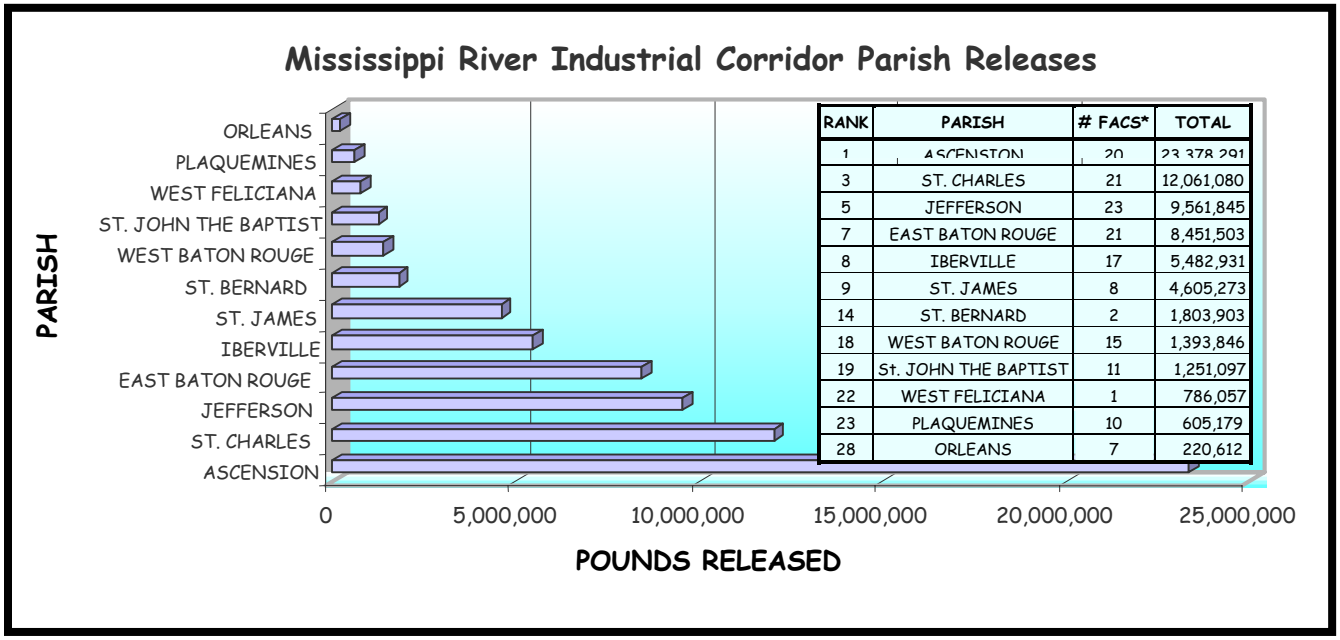
Figure 34-State and Industrial Corridors By Media & Total. This graph shows the totals for releases to individual media, and all media for the state and industrial corridors.

Louisiana Industrial Corridor Releases (in Pounds)			
	MRC	CIC	STATE
AIR	33,667,257	6,309,922	59,147,977
LAND	2,026,961	7,638,999	18,071,831
WATER	7,448,945	771,926	11,519,241
INJECTION	25,157,245	0	32,461,106
TOTAL	68,300,409	14,720,846	121,200,155

Figure 35-Louisiana Industrial Corridor Releases (in Pounds). This table shows the amount of toxics released in each of the industrial corridors, as well as the state totals.

2.15 Mississippi River Industrial Corridor Parishes

The Mississippi River Industrial Corridor (MRC) consists of 12 parishes along the Mississippi River, from West Feliciana to Plaquemines Parish. In 2001, 156 MRC facilities reported to TRI, accounting for approximately 70 million pounds released. Ascension Parish was the top parish in total releases, with approximately 23 million pounds of releases. St. Charles followed with approximately 12 million pounds of total releases. Jefferson released approximately 10 million pounds, and East Baton Rouge released about 8 million pounds. The rest of the MRC parishes reported less than 20 million pounds combined, with Orleans reporting the least. Jefferson had the most reporting facilities (23), followed by St. Charles and East Baton Rouge, with 21 facilities each. Ascension had 20 reporting facilities, and Iberville had 17. West Feliciana was the only MRC parish with one reporting facility.



RANK	PARISH	# FACS*	TOTAL
1	ASCENSION	20	23,378,291
3	ST. CHARLES	21	12,061,080
5	JEFFERSON	23	9,561,845
7	EAST BATON ROUGE	21	8,451,503
8	IBERVILLE	17	5,482,931
9	ST. JAMES	8	4,605,273
14	ST. BERNARD	2	1,803,903
18	WEST BATON ROUGE	15	1,393,846
19	St. JOHN THE BAPTIST	11	1,251,097
22	WEST FELICIANA	1	786,057
23	PLAQUEMINES	10	605,179
28	ORLEANS	7	220,612

Figure 36-Mississippi River Industrial Corridor Parishes. This table summarizes the MRC parish rankings as compared to all other Louisiana parishes. For each parish, the number of reporting facilities is also included. The total released (includes air, water, land, injection) in the MRC parish is illustrated in the graph. (* # FACS = Number of Facilities)

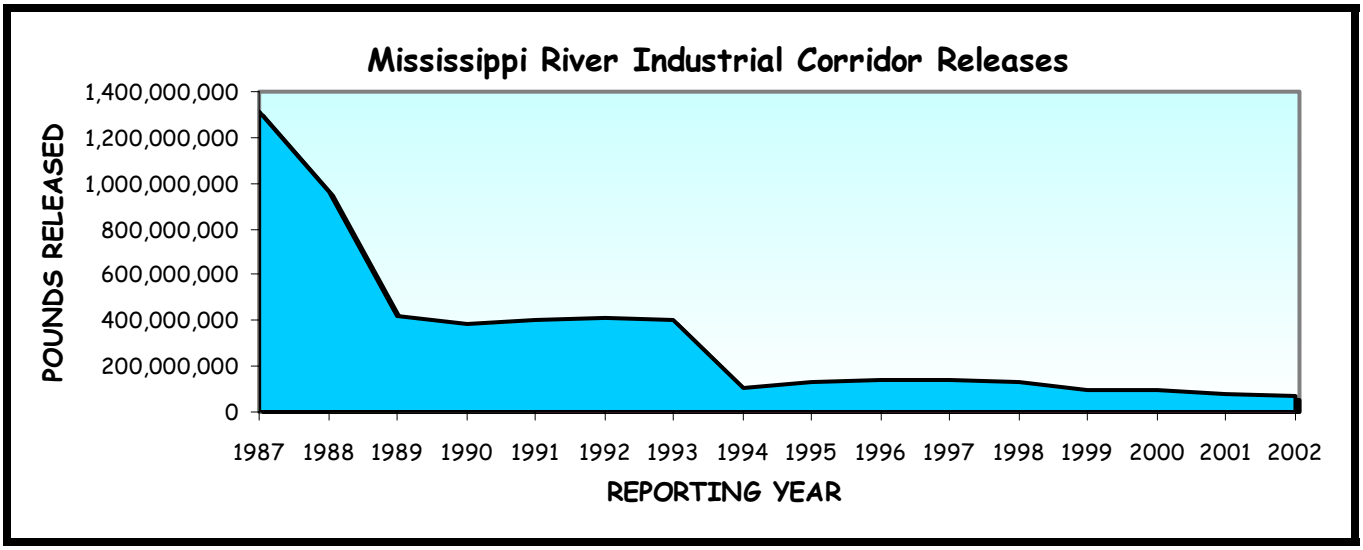


Figure 37 – Mississippi River Industrial Corridor Releases. Total releases for the MRC have decreased by 94% (1,242,543,518 pounds) since 1987 and by 7% (4,964,350 pounds) from 2001-2002.

2.16 Calcasieu Industrial Corridor

In 2002, there were 31 reporting facilities in the Calcasieu Industrial Corridor. These 31 facilities had total releases (air, water, land, injection) of approximately 14.7 million pounds. A couple of the most prevailing SIC codes for Calcasieu Parish was 28 and 29. SIC code 28 is reported as Chemicals and Allied Products and SIC code 29 is reported as Petroleum Refining and Related Industries.

Calcasieu Parish Releases by Facility (in Pounds)					
FACILITY	AIR	WATER	LAND	INJECTION	TOTAL
ARCH CHEMICALS INCORPORATED	3,718	0	0	0	3,718
BASELL USA, INC.	77,245	0	0	0	77,245
BIOLAB, INC.	28,620	0	0	0	28,620
BOLLINGER CALCASIEU, L.L.C.	2,705	0	44,900	0	47,605
CALCASIEU REFINING COMPANY	5,191	1,135	96	0	6,422
CARBOLINE COMPANY	7,564	0	0	0	7,564
CERTAINTEED CORPORATION	2,600	5	0	0	2,605
CHEMICAL WASTE MANAGEMENT	3,011	0	4,099,354	0	4,102,365
CITGO PETROLEUM CORPORATION	1,330,628	112,198	0	0	1,442,826
CONOCOPHILLIPS LAKE CHARLES	693,955	240,382	0	0	934,337
ENTERGY - ROY S. NELSON	246,414	18,936	0	0	265,350
FIRESTONE POLYMERS	1,590,619	0	0	0	1,590,619
GEORGIA GULF LAKE CHARLES, L.L.C.	14,377	0	0	0	14,377
GULF COAST LUBES PLANT	0	0	0	0	0
LAKE CHARLES CARBON COMPANY	47,012	21	135	0	47,168
LOUISIANA PIGMENT COMPANY, L.P.	18,642	9,170	3,494,512	0	3,522,324
LYONDELL CHEMICAL	56,648	230,534	0	0	287,182
OHMSTEDE, INC.	0	0	0	0	0
PPG INDUSTRIES, INC.	428,873	134,545	2	0	563,419
PUMPELLY OIL COMPANY	500	0	0	0	500
RESIN SYSTEMS, INC.	7,174	0	0	0	7,174
SASOL NORTH AMERICA LAKE CHARLES	320,897	919	0	0	321,816
SOUTHERN IONICS, INC.	202	0	0	0	202
TETRA CHEMICALS, INC.	2,951	0	0	0	2,951
VENTURE COKE COMPANY, L.L.C.	227,617	10	0	0	227,627
W.R. GRACE & COMPANY - CONN.	97,276	24,035	0	0	121,311
WESTLAKE PETROCHEMICALS CORPORATION	70,968	0	0	0	70,968
WESTLAKE PETROCHEMICALS, L.P.	558,103	34	0	0	558,137
WESTLAKE POLYMERS, L.P.	426,632	0	0	0	426,632
WESTLAKE STYRENE, L.P.	14,968	2	0	0	14,970
WESTLAKE STYRENE, L.P. - MARINE TERMINAL	23,373	0	0	0	23,373

Figure 38-Calcasieu Parish Releases by Facility (in Pounds). This figure shows each facility in Calcasieu Parish, along with the releases to each media (i.e., air, water, land, and underground injection) and total releases.

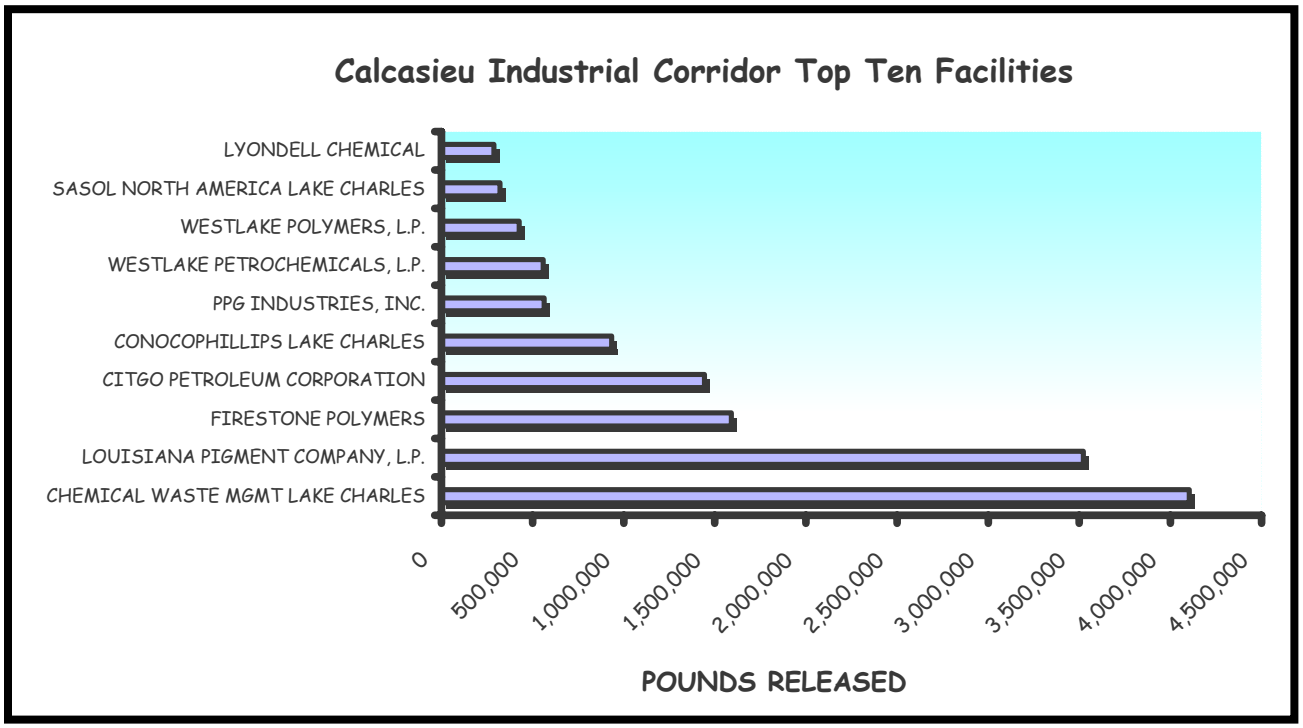


Figure 39-Calcasieu Industrial Corridor Top Ten Facilities. This figure shows the 10 facilities in Calcasieu Parish with the greatest amount of total releases (air, water, land, injection included) for Reporting Year 2002.

The Calcasieu Parish Industrial Corridor shows an 88% decline from 1987, and an 11% increase from 2001. The greatest reduction (79%) was seen in 1989, where the total releases decreased from approximately 133 million pounds to 28 million pounds. For the past five (5) years releases have been below 20 million pounds.

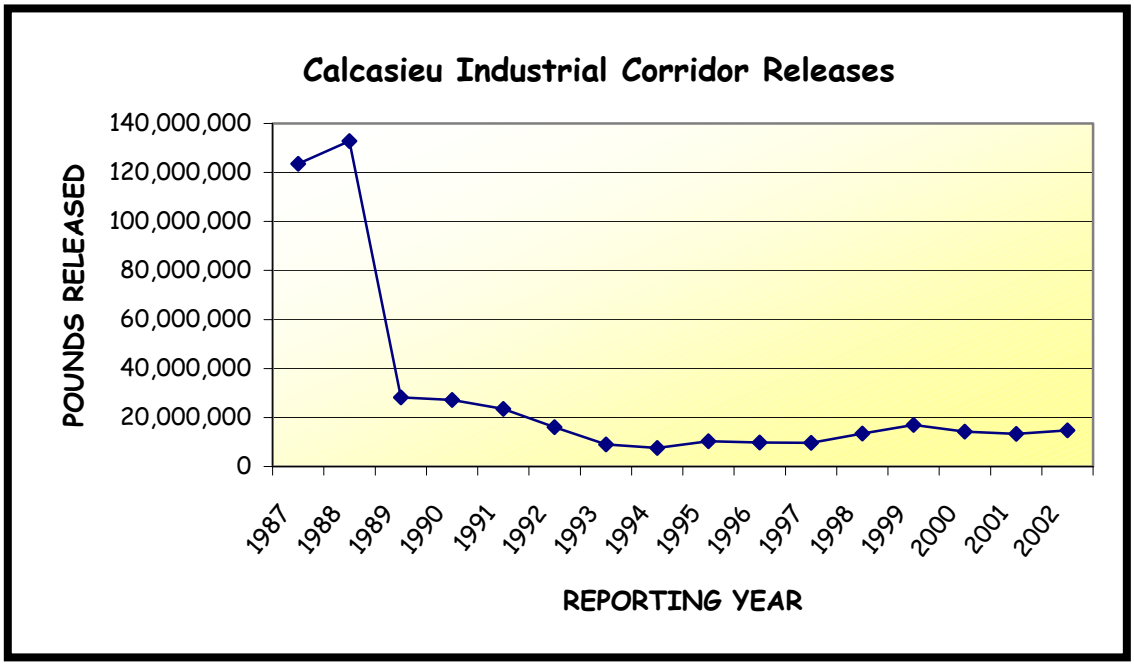


Figure 40-Calcasieu Industrial Corridor Releases. This graph indicates that total releases in the Calcasieu Industrial Corridor have decreased over time. Data is presented in total releases (air, water, land, injection).

Chapter 3-Emission Inventory (EI) Program

The regulations governing the Emissions Inventory (EI) Unit were developed as a result of the Clean Air Act (CAA) of 1970. This law, signed in response to the rapid increase in air pollution and smog nationwide, allowed the EPA to regulate the level of air pollutants emitted. In particular, CAA allowed EPA to implemented the following:

1. National Ambient Air Quality Standards (NAAQS) standards were set for six criteria pollutants commonly found throughout the United States. These are Lead, Ozone, Nitrogen Oxides (NOx), Carbon Monoxide (CO), Sulfur Dioxide (SO_2), and Particulate Matter less than 10 microns (PM10).

2. National Emissions Standards for Hazardous Air Pollutants (NESHAPS or MACT standards) were in a proactive effort to control the emission of 188 hazardous air pollutants. Hazardous air pollutants, also known as toxic air pollutants or air toxics, are those pollutants that cause or may cause cancer or other serious health effects (i.e., reproductive effects or birth defects), or may adversely affect the environment. These toxics are primarily emitted by stationary sources (i.e., factories, power plants, etc.) and mobile sources (i.e., cars, buses, planes, etc.).

3. States were required to develop EPA-approved implementation plans (SIP's) that enforce the regulations governing state-specific industrial sources of HAPs and criteria pollutants. To encourage adherence to the standards set by EPA, deadlines for meeting these standards were established.

In 1990, the CAA was amended to more effectively achieve the air quality goals and regulatory reform. The following changes were made by the 1990 CAA amendments:

1. Areas (i.e., parishes or groups of parishes) that had not yet met the NAAQS for criteria pollutant(s) were designated as "nonattainment." "Attainment" was used to describe areas that were in compliance.

2. The permitting program was one of the major breakthroughs of CAA 1990. New facilities in nonattainment areas were required to seek New Source Review (NSR) permits. Permits in attainment areas were designated Prevention of Significant Deterioration (PSD) permits, which require that the best available control technology (BACT) be considered in the installation of pollution controls. Non-Attainment Area (NAA) permits were issued in nonattainment areas, and mandated that emissions meet the lowest achievable emission rate (LAER). Fees were assessed for each permit obtained.

3. A new emphasis was also placed on controlling acid rain and ozone depletion, as well as the emission of hazardous pollutants. The 1990 CAA amendments revised deadlines and authorized the EPA to fine violators. In addition, public participation was highly encouraged and economic incentives for reducing pollution were introduced to industry.

The CAA was amended again in 1997, thereby proposing a program to control regional haze. Revisions to strengthen the standards for ozone and particulates were also made. Additionally, particulate matter less than 2.5 microns (PM2.5) was added as a criteria pollutant.

3.1 Criteria Pollutant Emissions Inventory Reporting

Louisiana Administrative Code (LAC) 33:III.919 requires regulated facilities to report the release of VOCs, NOx, CO, SO_2, PM10, PM2.5, Ammonia and Lead from the previous calendar year, to the Louisiana Department of Environmental Quality (LDEQ). Emission Inventory data shall be submitted to the LDEQ in the format specified by the Office of Environmental Assessment, Environmental Evaluation Division by March 31 of the following year. The emissions are maintained in the state's Emissions Inventory database (EI), and are made available to the public on the LDEQ website and through data requests. Annually, the state data is uploaded to the EPA's National Emissions Inventory (NEI) database.

Who MUST submit to EI? According to LAC 33:III.919, facilities that meet the following requirements are required to submit data summarizing their criteria pollutant emissions to LDEQ:

1. Any facility in an **attainment** area, that emits or has the potential to emit 100 tons per year (TPY) or more of any pollutant for which a NAAQS has been issued.

2. Any facility in a marginal, moderate, or serious ozone **nonattainment** area, that emits or has the potential to emit 10 TPY VOC, 25 TPY NOx, or 100 TPY CO or any other pollutant for which a NAAQS has been issued.

3. Any facility that emits or has the potential to emit 50 TPY or more of VOC or 100 TPY or more of any other contaminant for which a NAAQS has been issued, in an area adjoining an ozone nonattainment area.

4. Any facility that is identified as a major source of hazardous air pollutants (HAPs) or operates under a Title V permit.

There are no exemptions to the afore-mentioned stipulations. All emissions must be reported by eligible facilities for each emission point, including insignificant sources, start-ups and shutdowns, upsets, accidents, fugitives, and flash gas emissions.

3.2 Benefits and Limitations

Benefits. The information collected in the EI is beneficial in many ways. The emissions and data elements are used in modeling analyses to develop control strategies for the reduction of pollution. Pollution trends can be reviewed to evaluate the control of pollution, and emission sources can be compared to find the major contributors.

The data is public, thereby providing citizens with information about emissions in their neighborhoods. Emissions Inventory information is also shared with the federal government so that it and other state agencies may use the information to identify areas of concern, monitor ozone and acid rain production, set regulatory priorities more effectively, and track the effects of pollution control. Industry can also benefit from the data by using it to obtain an overview of releases, manage emissions, and to monitor progress toward reduction goals.

Limitations. EI data is a key source of environmental information and is very helpful; however, there are some limitations to be considered when using the data. The emissions data is not comprehensive because the facilities that do not meet the reporting threshold are not required to report; therefore, the EI database does not contain their emissions. Also, data is not well defined for some of the years during the introductory phase of the program, as guidance and methodologies were not well established. The usage

and availability of numerous guidance documents and methodologies also contribute to variation in the emissions data reported between facilities.

This information also changes often as the scientific community continues to research the health effects of chemicals, update established standards, and improve estimation methodologies. Furthermore, corrections can be submitted at any time, therefore the EI database itself is dynamic. This must be considered when evaluating data accuracy and comparability.

3.3 New Developments in Emissions Inventory

In 2002, the LDEQ requested facilities to report Particulate Matter of 2.5 microns or less (PM2.5) and Ammonia, in addition to the other pollutants normally reported. EPA enforced these changes through the recent promulgation of the Consolidated Emissions Reporting Rule (CERR).

3.4 Criteria Pollutants Emissions for 2002

Emissions Inventory data were submitted by over 900 facilities for Reporting Year 2002. Based on the 2002 statewide data, approximately 78,000 tons of VOCs and 310,000 tons of NOx were reported to EI. Calcasieu Parish was the leading emitter of VOC. This parish also contained, Citgo Petroleum, the leading VOC-emitting facility. For NOx emissions, St. Charles was the leading parish and Entergy's Ninemile Plant, in Jefferson Parish, was the top facility.

In Louisiana, one area remains designated as nonattainment for ozone. The area consists of five parishes -- Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge. VOC and NOx emissions for the five-parish area and the state are presented in the chart below.

VOC and NOx. The criteria pollutants VOC and NOx display a downward trend from 1990 to 2002. VOC reported statewide have decreased by 40% (51,645 tons) from 1990 to 2002, and by 2% (1,823 tons) since 2001. From 1990-2002, statewide NOx emissions have decreased by 25% (100,941 tons), and increased by 1% (3,297 tons) since 2001.

VOC and NOx totals reported by the five-parish area have decreased by 66% (25,926 tons) and 36% (24,288 tons), respectively, from 1990-2002. In the five-parish area, there was a 7% (1,069 tons) decrease in reported VOC and an 11% (5,548 tons) decrease in NOx since 2001. This data is illustrated in Figures 42 and 43.

Emissions of VOC and NOx

Reporting Year	VOC (tons)		NOx (tons)	
	5-Parish Area	LA Total	5-Parish Area	LA Total
1990*	38,948	129,455	66,703	410,928
1993*	24,965	136,924	58,930	398,428
1994	26,048	137,086	59,714	403,383
1995	22,238	134,131	57,755	374,515
1996	21,192	137,318	57,096	374,400
1997	20,434	119,593	52,723	367,125
1998	19,658	106,913	52,938	357,091
1999	17,007	91,892	49,817	341,478
2000	16,711	85,294	50,025	339,259
2001	14,091	79,633	47,936	306,690
2002	13,022	77,810	42,415	309,987

Figure 41 - Emissions of VOC and NOx. The figure shows a downward trend for VOC and NOx emissions from 1990–2002 across the state and in the five ozone nonattainment parishes.

*1991 and 1992 emissions are not available because an inventory was not collected. 1990 and 1993 totals were obtained from sub-par electronic data files.

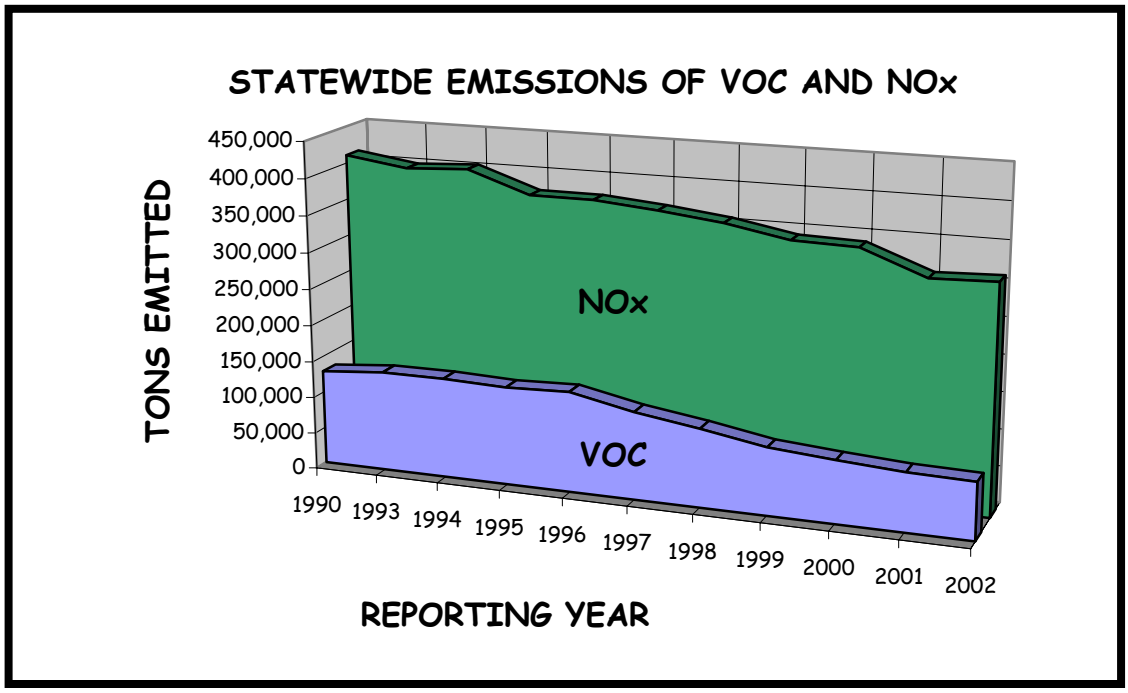


Figure 42-Statewide Emissions of VOC and NOx. This graph displays VOC and NOx emissions reported across Louisiana. A downward trend is observed from 1990-2002.

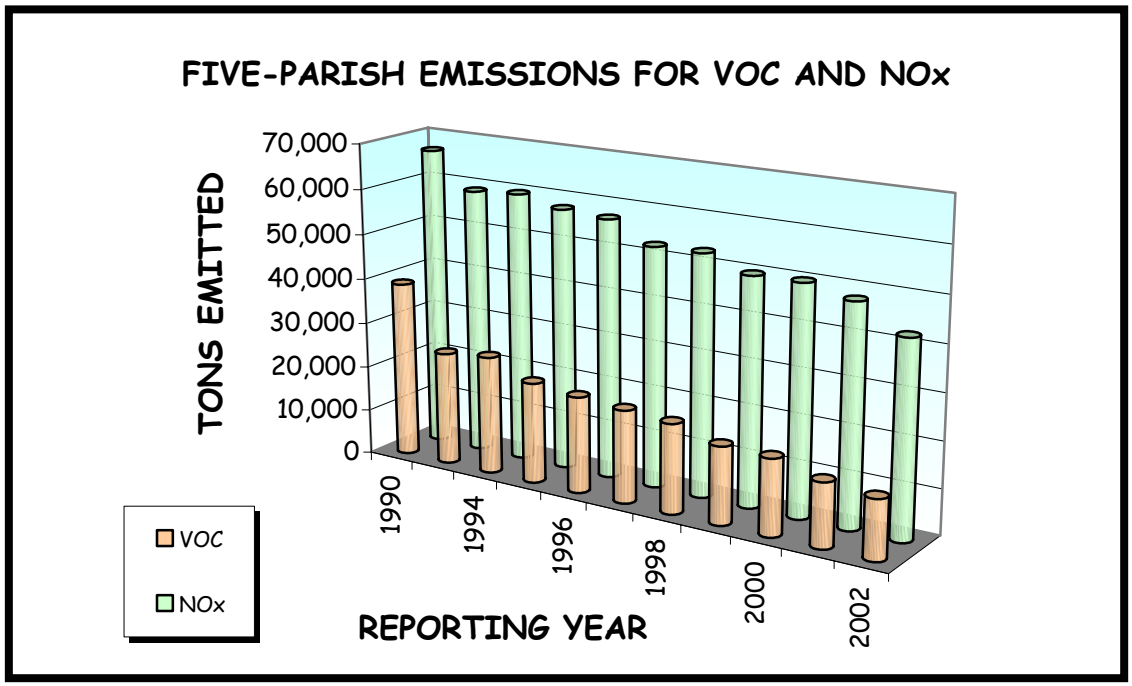


Figure 43-Five-Parish Emissions for VOC and NOx. This figure displays the reported five-parish data for VOC and NOx emissions. A downward trend is observed from 1990-2002.

CO, SO_2, & PM10. Figure 44 displays a downward trend for CO and PM10 emissions, and an increase in SO_2 from 1990 to the current reporting year. Statewide CO emissions reported to EI decreased by 73% (382,942 tons) from 1990 to 2002, and by 2% (2,280 tons) since 2001. For 2002, SO_2 has increased by 4% from 1990 (9,855 tons) and 3% (8,603 tons) from 2001. Reported PM10 emissions decreased by 24% since 1990 (10,433 tons), and decreased by 2% (487 tons) since 2001.

EMISSIONS FOR CO, SO_2, & PM10			
YEAR	CO	SO_2	PM10
1990	527,994	275,585	43,690
1993	600,290	283,928	49,579
1994	619,087	275,419	46,151
1995	624,192	260,276	41,325
1996	641,833	262,335	39,710
1997	258,614	302,248	40,300
1998	179,160	299,499	38,156
1999	198,854	295,125	36,746
2000	167,324	286,925	35,822
2001	147,332	276,837	33,744
2002	145,052	285,440	33,257

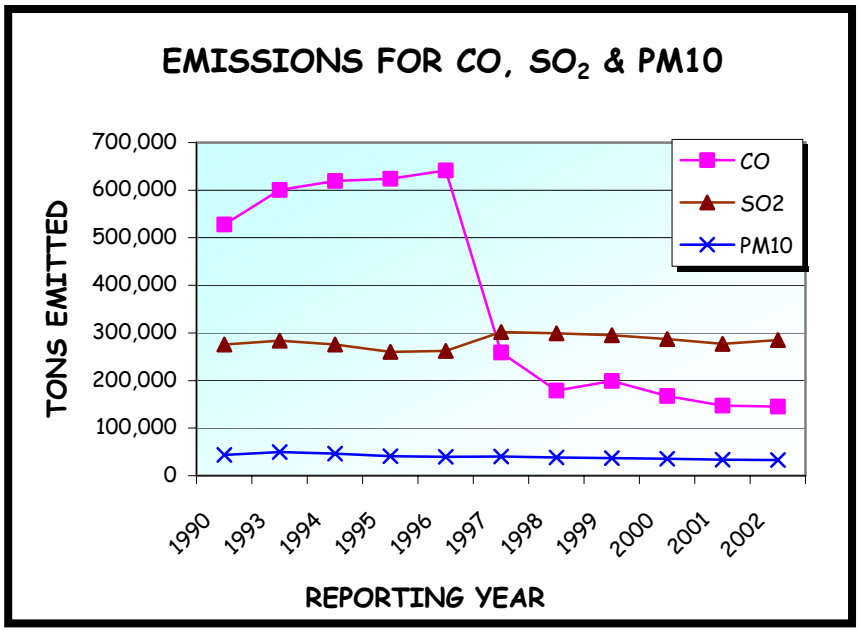
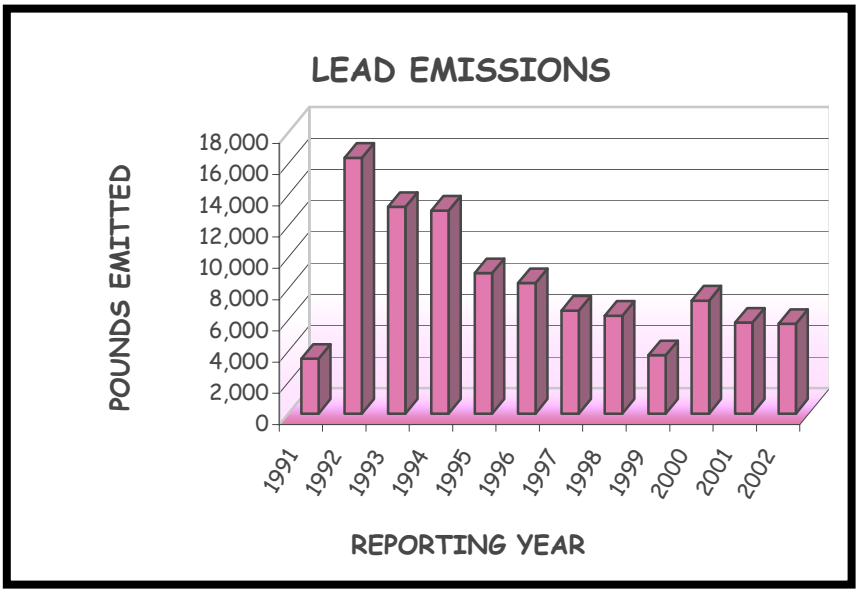


Figure 44-LA Emissions for CO, SO_2, and PM10. The graph displays a downward trend for reported CO and PM10, and a slight increase in SO_2 emissions since 1990. The absolute values reported to the Emission Inventory are indicated in the table.

Lead. Lead was first reported to the Emissions Inventory in 1992. Since that time, air emissions have decreased by 65% (10,634 pounds). From 2001-2002, lead has decreased by 3% (86 pounds).



LEAD EMISSIONS (in Pounds)	
REPORTING YEAR	LEAD EMISSIONS
1992	16,381
1993	13,237
1994	12,999
1995	8,986
1996	8,352
1997	6,601
1998	6,276
1999	3,739
2000	7,233
2001	5,833
2002	5,747

Figure 45-Lead Emissions. This figure shows that lead emissions have decreased since first reported in 1992. The absolute values for lead emissions reported to the Emissions Inventory are in documented in the table. Lead emissions are indicated in pounds.

3.5 Periodic Emissions Inventory

As mandated by the Clean Air Act, LDEQ submits a Periodic Emissions Inventory (PEI) to the EPA every three years. This report summarizes VOC and NOx emissions by source, including point sources, area sources, mobile sources (on- and off-road), and biogenic sources. Each is described below.

- **Point sources** are facilities or activities, for which individual records are maintained in the EI database. These may include industrial and nonindustrial stationary equipment or processes considered significant sources of air pollution emissions. Industrial and commercial boilers, turbine engines, wood and pulp processors, paper mills, industrial surface coating facilities, refinery and chemical processing operations, and petroleum storage tanks are examples of point sources.

- ***Area sources*** are a collection of many small, individually unidentified points of air pollution, too numerous or too small to be addressed individually. For example, dry cleaners, bakeries, and pesticide application are classified as area sources.

- ***On-road mobile sources*** include vehicles that travel on the road or highways for commuter purposes, commercial or private, and for transportation of products. On-road mobile sources include cars, buses, and motorcycles. ***Off-road sources*** are those vehicles used off of highways and roads, such as railroad locomotives, marine vessels (commercial and recreational), and lawn and garden equipment.

- **Biogenic sources** are comprised of emissions that are created by the natural biological processes of trees, plants, and agricultural crops.

Starting with reporting year 2002, the PEI will include estimates of all criteria and toxic air pollutants due to the recent promulgation of the Consolidated Emissions Reporting Rule by the EPA. While in past PEI reports, emissions from the nonattainment parishes alone were reported, the CERR requires the PEI to account for emissions statewide. Due to the drastic increase in required data, the 2002 PEI was not available prior to the publication of this report. The 2002 PEI emissions data is due to the EPA's National Emissions Inventory database on June 1, 2004. The PEI document is due to the EPA by November 1, 2004. The data will be made available through the LDEQ at that time.

Chapter 4-Toxic Emissions Data Inventory (TEDI) Program

In 1991, the Comprehensive Toxic Air Pollutant Emission Control Program was established by LDEQ, to regulate major sources of toxic air pollutants (TAPS) under Chapter 51 of the Louisiana Administrative Code Title 33, Part III (LAC 33:III.Chapter 51). Regulated sources include existing, new, and modified sources that emit, or have the potential to emit, 10 or more tons per year of any single toxic air pollutant, or 25 or more tons per year of any combination of TEDI pollutants (listed in the Appendix, Table 6). The program also applies to facilities that were originally characterized as major sources, but have achieved minor source status through the reduction of emissions or the potential to emit.

In accordance with LAC:33.III.Chapter 51, the owner or operator of any stationary source subject to the above requirements shall submit a completed TEDI report to the LDEQ on or before July 1 of each year. Each report shall identify the quantity of listed toxic air pollutant(s) emitted for the previous year. For example, the TAPS emitted for 2002 were reported to LDEQ on or before July 1, 2003 and are summarized in this year's report. The data to be reported must be in ASCII format (for examples please refer to the DEQ web page http://www.deq.state.la.us/evaluation/airmon/tedi.htm). Along with the data, a certification statement must be submitted by the facility.

Special provisions and prohibited activities related to TEDI are listed under LAC 33:III.5105. All reporting requirements for annual emissions and discharges, availability of information, and provisions for public notice are described in LAC 33:III.5107.

4.1 Benefits and Limitations

Benefits. TEDI is an extraordinary database that is unique to Louisiana. This database takes the Clean Air Act one step further, requiring major sources to report toxic chemicals released into the air. The data is then presented yearly in report format, thereby providing public access to the types of toxic air pollutants being released from local facilities. The information can be given to customers via data requests, and can provide information at a local, state and regional level. Responsible use of data can help the public to address fears and concerns, assess risks, and work with industry and the government to form a healthier environment.

Limitations. TEDI data is a key source of environmental information. However, there are some limitations to be considered when using this data. Since the program was implemented in 1991, no TEDI data is available prior to that year. TEDI data only comes from major or "once major" sources, so releases from some facilities may not be captured. Another limitation is that some facilities report estimated data; variations due to measuring techniques produce varying results. TEDI is also a dynamic database; facilities can submit corrections at any time when better emission calculations are available. These limitations should be taken into account when considering data accuracy and comparability. TEDI data contains only parish location for each facility. Therefore, specific information on the exact location of emission points must be obtained and correlated to TEDI information prior to entering the data into the National Emissions Inventory and for air toxics modeling.

4.2 TEDI Data

For reporting year 2002, the TEDI Program collected data from more than 270 facilities. Approximately 53 million pounds of Toxic Air Pollutants (TAPS) were reported to TEDI. Ammonia was the most prevalent TAP, for which 16 million pounds was reported. Ascension Parish emitted the most TAPS, and CF Industries in Ascension Parish, was the top TAPS emitting facility.

2002 Parish Ranking by Total TEDI Releases (in Pounds)							
RANK	PARISH	# FACILITIES	TOTAL	RANK	PARISH	# FACILITIES	TOTAL
1	Ascension	16	13,850,658	27	Sabine	3	149,930
2	East Baton Rouge	17	4,220,143	28	Tangipahoa	1	143,757
3	De Soto	4	4,061,846	29	Livingston	3	110,558
4	Calcasieu	22	3,946,187	30	Union	2	101,003
5	St. James	6	2,427,572	31	Pointe Coupee	2	98,153
6	West Baton Rouge	9	2,107,099	32	Lafourche	8	87,954
7	St. Charles	16	2,072,016	33	Lincoln	1	82,389
8	Washington	2	2,051,379	34	Winn	2	71,106
9	Morehouse	1	1,999,111	35	Assumption	5	70,626
10	Beauregard	3	1,969,947	36	La Salle	1	61,974
11	Ouachita	10	1,898,833	37	Iberia	5	56,886
12	Iberville	9	1,608,686	38	St. Martin	4	51,085
13	St. Bernard	5	1,365,311	39	Allen	1	42,073
14	Jackson	1	1,303,256	40	Terrebonne	7	39,275
15	Rapides	3	1,213,179	41	St. Tammany	1	36,444
16	Caddo	10	1,089,676	42	Bossier	1	18,086
17	Natchitoches	3	976,230	43	Vernon	1	15,842
18	Jefferson	19	722,544	44	Cameron	10	13,908
19	West Feliciana	1	670,292	45	Vermilion	9	4,041
20	St. John the Baptist	6	629,413	46	Grant	1	3,060
21	Plaquemines	12	481,123	47	Richland	1	1,392
22	St. Mary	15	465,502	48	Jefferson Davis	1	1,298
23	St. Landry	3	272,600	49	Bienville	1	576
24	Orleans	5	212,998	50	Tensas	2	35
25	Evangeline	2	211,657	51*	Acadia	1	0
26	Webster	3	187,023				

Figure 46-2002 Parish Ranking by Total TEDI Releases (in Pounds). * There are 64 parishes in Louisiana. Only those parishes containing TEDI facilities that report releases for this category are listed above.

Louisiana Air Releases. A downward trend in TEDI Air Emissions is observed from 1991-2002. Overall, TAPS have decreased by 63% since the inception of the TEDI program in 1991. From 2001-2002, TAPS increased by 8% increase (four million pounds); this increase is attributed to an increase in ammonia production.

TEDI Air Emissions		
Reporting Year	TAPS Reported	% Decrease from 1991
1991	142,370,572	--
1992	121,200,852	14.9
1993	112,877,922	20.7
1994	114,842,523	19.3
1995	108,059,509	24.1
1996	104,510,875	26.6
1997	88,269,704	38.0
1998	80,928,264	43.1
1999	67,649,487	52.5
2000	58,759,772	58.7
2001	49,814,411	65.0
2002	53,275,732	62.5

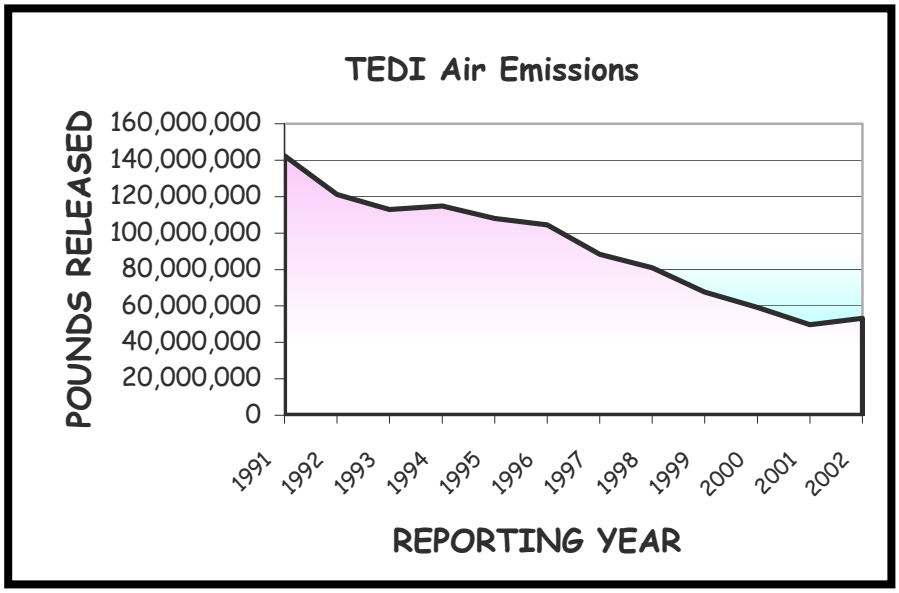


Figure 47-TEDI Air Emissions. The figures above display a downward trend in total TAPS statewide since the inception of the TEDI program in 1991. For 2002, the 8% increase (four million pounds) in TAPS is attributed to an increase in ammonia production.

TEDI Chemicals by Class. TEDI chemicals (i.e., toxic air pollutants or TAPS) can be placed in one of three classes. Class I chemicals are known and probable human carcinogens; this class accounts for 3% of the total TAPS reported. Class II chemicals (13%) are *suspected* human carcinogens and known or suspected human reproductive toxins. Class III chemicals, acute and chronic (non-carcinogenic) toxins; represent the majority of TAPS (84%). For further reference, a listing of all regulated toxic air pollutants is found in the Appendix, Table 5.

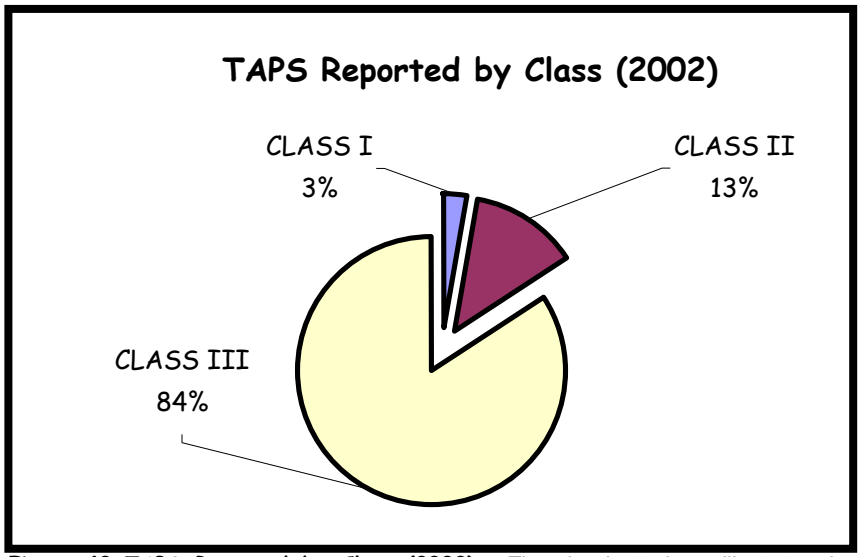


Figure 48-TAPS Reported by Class (2002). The pie chart above illustrates the percentages of chemicals reported to each TEDI Class of Pollutants. Class I accounts for 3%; Class II and Class III are 13% and 84%, respectively.

From 1991-2002, there was a 62% decrease in the total TAPS released (88,422,037 pounds). Class I Carcinogens decreased by 81% (6,192,929 pounds); Class II decreased by 65% (12,957,455 pounds); and Class II decreased by 69,922,370 pounds (61%) since the inception of the TEDI program.

Since Reporting Year 2001, Class I chemicals have decreased by 7% (103,901 pounds), while Class II and Class III have increased by 11% (679,260 pounds) and 7% (2,855,960 pounds), respectively. Total TAPS have also increased since 2001 (8% or 4,112,038 pounds).

TAPS Totals by TEDI Chemical Class (in Pounds)				
Reporting Year	Class I	Class II	Class III	Total
1991	7,617,090	19,944,193	114,787,203	142,348,486
1992	6,171,423	19,829,332	94,305,368	120,306,123
1993	4,853,423	19,493,244	87,539,011	111,885,678
1994	4,244,180	19,540,357	89,864,668	113,649,605
1995	4,095,580	17,237,750	85,395,105	106,728,435
1996	4,030,516	16,437,071	82,970,483	103,438,070
1997	4,007,131	10,024,287	73,351,604	87,383,022
1998	2,691,405	8,739,886	68,531,959	79,963,250
1999	2,125,520	6,680,599	58,053,348	66,859,467
2000	1,886,922	6,810,669	50,062,181	58,759,772
2001	1,528,062	6,307,478	41,978,873	49,814,411
2002	1,424,161	6,986,738	44,864,833	53,926,449

Figure 49-TAPS Totals by TEDI Chemical Class (in Pounds). The table shows the total pounds emitted for TEDI Class I, II and III Chemicals.

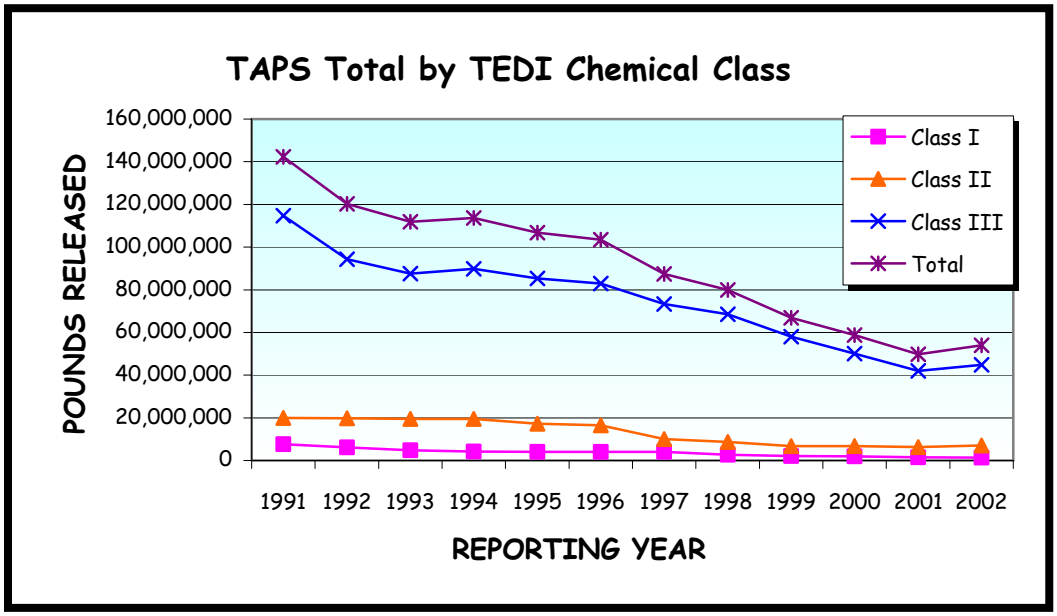


Figure 50-TAPS Total by TEDI Chemical Class. This graph illustrates comparative data for the different TEDI chemical classes. A downward trend is observed since 1991.

Benzene Emissions. Benzene emissions comprise the largest amount of Class I emissions, and are included in the Class I totals, and the Total Chemicals figures. This chemical is of special concern because of its known cancer-causing abilities. Since 1991, benzene releases have decreased by 90% (6 million pounds), as have its dominance of the Class I Chemical category.

Benzene vs. Class I Totals			
RY*	Class I (in pounds)	Benzene (in pounds)	% Benzene
1991	7,617,090	6,653,094	87%
1992	6,171,423	4,934,080	80%
1993	4,853,423	3,819,786	79%
1994	4,244,180	3,355,639	79%
1995	4,095,580	3,271,013	80%
1996	4,030,516	3,023,722	75%
1997	4,007,131	2,740,856	68%
1998	2,691,405	1,709,267	64%
1999	2,125,520	1,271,444	60%
2000	1,886,922	978,021	52%
2001	1,528,062	703,884	46%
2002	1,424,161	650,717	46%

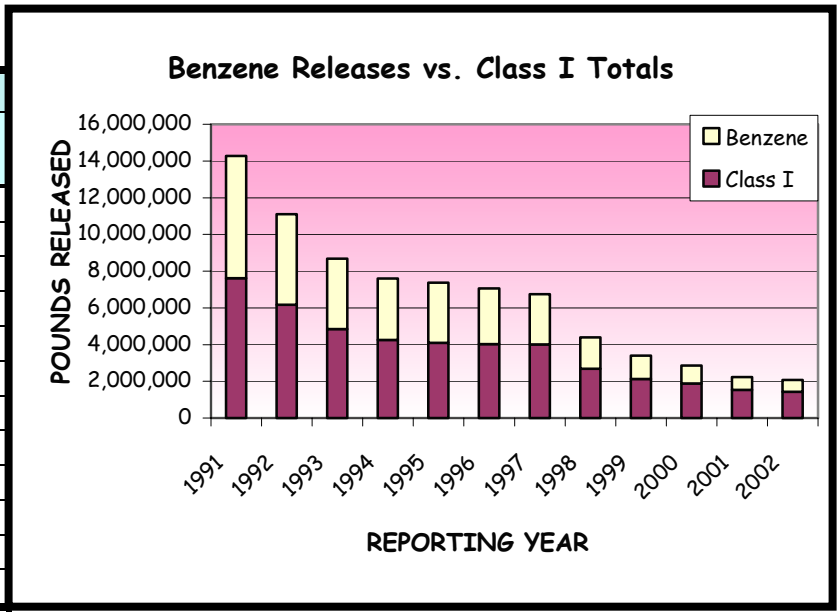


Figure 51 - Benzene vs. Class I Totals. Pounds emitted for TEDI Class I chemicals and benzene are shown in the table above. Over the years, benzene releases have decreased by 90%. The prevalence of benzene in the Class I emissions has also decreased since 1991.

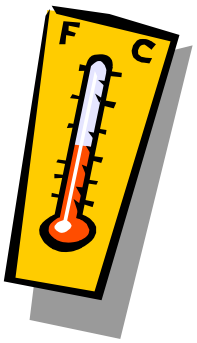
* RY = Reporting Year

Chapter 5-Chemicals In The News

This chapter replaces "Special Interest Chemicals" (Section 2.11 in the 2001 Louisiana Environmental Inventory Report), which provided health information on selected chemicals. In this year's report, chemical background, LDEQ initiatives, and other related public awareness topics will be discussed in addition to health information. Mercury & Mercury Compounds were selected for the 2002 publication.

Mercury & Mercury Compounds

Elemental Mercury. Mercury is a naturally occurring element most commonly found as a silvery, high-density liquid. Metallic mercury is used in thermometers, barometers, mirror coatings, and in making chemicals and electrical equipment. Mercury can also combine with other chemicals, such as chlorine, carbon, or oxygen to form other inorganic or organic mercury compounds.



Exposure to mercury can occur by breathing its vapors, drinking water that contains mercury, eating a plant or animal that has accumulated mercury, or by absorption through the skin. Health problems caused by mercury depend on *how much* enters the body, *how* it entered, the length of the exposure (i.e., *how long*), and *how the body responds* to mercury (i.e., individual sensitivity to mercury).

The emission of mercury/mercury compounds in Louisiana can generally be attributed to five sources:

- Chloralkali plants
- Electrical Utilities
- Petroleum Refineries
- Pulp and Paper Mills
- Chemical Manufacturing Facilities

Methyl Mercury. The presence of elemental mercury in water, air, or sediments is not usually sufficient to cause a problem. However, when mercury is released into the air, for example through the burning of fossil fuels, it can fall directly onto waterways or be deposited on land where it can be washed into the water. Upon entering water that has a high content of organic matter, is low in oxygen, and contains sulfur-reducing bacteria, mercury can be transformed into to the highly toxic compound *methyl mercury*.

Health Hazard Information

Acute Health Effects

- Irritate the lungs causing cough, chest tightness
- Shortness of breath and fever, which may develop to fluid in the lungs and death

Chronic Health Effects

- *Mercury poisoning*
  Symptoms include:
  - Tremors
  - Difficulty remembering, concentrating
  - Gum problems
  - Increased salivation
  - Loss of appetite, weight
  - Mood, personality changes
- Clouding of the eye lens
- Kidney damage

Reproductive Hazards

- *Teratogen*—hazardous to both male and female sex organs
- Spontaneous abortion
- Lower sex drive

When methyl mercury is present in sediment, small organisms living in the water body absorb it. As small fish eat these organisms, methyl mercury is concentrated in the fish tissue. Larger fish then eat these small fish, causing methyl mercury to be further concentrated in this aquatic food chain, a process known as *biomagnification*. Because of this, the primary source of human exposure to mercury is through the consumption of predator fish such as bass, bowfin, and king mackerel.

Public Awareness. Many states collect data on mercury levels in fish from local water bodies and issue fish consumption advisories. In the state of Louisiana, potential advisories are triggered when mercury levels exceed 0.5 ppm (parts per million) in fish tissue samples. Upon confirming mercury levels, the Louisiana Departments of Health and Hospitals (LDHH), Environmental Quality (LDEQ), and Wildlife and Fisheries (LDWF) jointly issue fish consumption advisories to help ensure the safe enjoyment of Louisiana's water resources. Additionally, LDEQ posts signs at public boat ramps on the affected waterways to alert fishermen about the advisories. Currently, there are 29 fish consumption advisories for Louisiana waterways and one for the Gulf of Mexico.

It is generally recommended that persons read the advisories and limit their consumption of certain fish from water bodies that are under advisories. Women that are pregnant (or could become pregnant) or are nursing a baby should be extra careful to follow the advisories. Individuals feeding fish to a young child should also be extra careful to follow the advisories since young children are most sensitive to mercury exposure. For adults, one meal is six ounces of cooked fish or eight ounces of uncooked fish; for a young child, one meal is two ounces of cooked fish or three ounces of uncooked fish. If a person eats more than 4 meals of fish per month from local water bodies, they may increase their health risk.

Mercury Initiatives at LDEQ. Mercury contamination has been on the LDEQ agenda since the early 1980's. Over the decades, this agency has progressively expanded its capability to investigate and address mercury-related problems. The Mercury Program seeks out waterways where mercury may be a problem and provides information to the public so they can make informed decisions to reduce their risk of mercury exposure. The program also uses research, outreach, and multi-agency cooperation to reduce the effects of man-made sources of mercury in the environment. The 2003 Resource Guide to Understanding Mercury in Louisiana's Environment is one tool by which this program informs the public of the State's efforts to assist in protecting citizens from exposure to mercury.

More recently, the various mercury platforms throughout the agency have been consolidated into a "Mercury Workgroup." This cross-divisional workgroup will clearly define the mercury problem in our state and develop a more comprehensive approach to resolving these issues. Some of the on-going mercury initiatives currently being evaluated are described below.

- **Mercury Fish Sampling** has been part of LDEQ's efforts since 1986. Sampling is used to evaluate the mercury levels of fish commonly consumed by Louisiana residents, and to determine whether mercury levels in the sampled water bodies are harmful. Fish samples, as well as area water, sediment, and plants, are collected and analyzed. The information is reviewed by LDHH to decide if a mercury advisory should be issued. Each year, LDEQ staff samples more than 100 water bodies and approximately 400 sampling sites are on file.

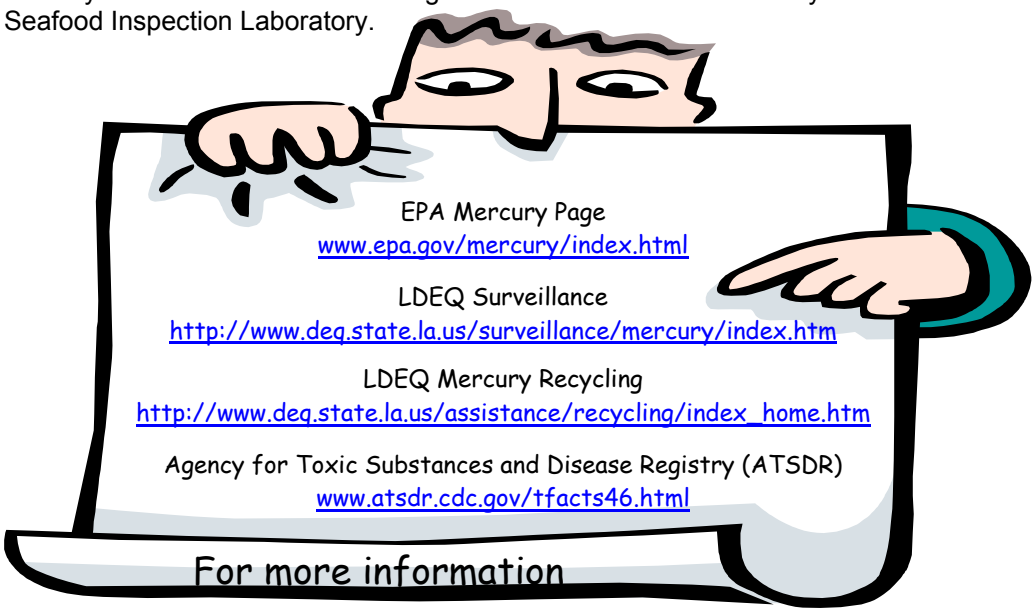
- **Surface Water Monitoring.** Monitoring for mercury in Louisiana surface waters was incorporated into the state's Ambient Surface Water Monitoring Program in the late 1970s. Currently, LDEQ monitors approximately 120 sites/year. LDEQ also has an intensive, non-routine clean sampling program that is used for follow-up confirmation when mercury is found above water quality standards during routine monitoring.

- **Mercury Retrieving and Recycling** activities sponsored by LDEQ limit the amount of mercury that enters the environment. Household Hazardous Materials Collection Days are one initiative the Recycling Section at LDEQ sponsors to provide a central disposal site for household materials such as mercury-filled thermometers. A list of recyclers is also provided for the general public. LDEQ recently obtained federal funding for the Statewide Mercury Sweep to help reduce mercury releases, exposures, and uses. This outreach effort will also educate the public on safe storage, recycling and disposal of mercury.

- LDEQ sponsors 4 monitoring sites throughout the state that collect mercury data for the **Mercury Deposition Network**, a national database that tracks the levels of mercury in precipitation. The monitoring sites are located at Louisiana State University-Monroe, Louisiana State University-Alexandria, Southeastern Louisiana University in Hammond, and McNeese State University in Lake Charles. The information collected at these monitoring sites will be used to evaluate how mercury air emissions travel through the atmosphere and are deposited on areas distant from the emission source.

- **Mercury Clean up and Elimination.** The Environmental Technology Division at LDEQ is working with natural gas pipeline companies to clean up contaminated soil that has resulted from historical spills. Since 1991, approximately 5,000 sites have been checked for mercury contamination and about 2,500 have been successfully cleaned to LDEQ clean up standards. Also, several beneficial environmental projects have been recently organized to eliminate mercury in schools.

- LDEQ is involved in **National Mercury Initiatives**. In May 2002, LDEQ participated in The Mercury Forum. Under the guidance of the National Science and Technology Council, over 300 Gulf State representatives met in Mobile, Alabama to decide how to best assess mercury concentrations in the Gulf of Mexico. Agency representatives have recently been involved in Gulf testing efforts that will be conducted by the National Seafood Inspection Laboratory.



Chapter 6-Hot Topics at LDEQ

6.1—Fighting the Ozone Exceedance Issue

What is Ozone? Ozone (O_3), an odorless, colorless gas composed of three atoms of oxygen, is the primary ingredient of smog. It can be good or bad, depending on where it is found. *Good Ozone* occurs naturally in the Earth's upper atmosphere—10 to 30 miles above the Earth's surface—where it forms a protective layer that shields us from the sun's harmful ultraviolet rays. Over time, this layer has been damaged by the manufacture and use of chemicals such as chlorofluorocarbons (CFCs) and halons. *Bad Ozone* (or "ground-level ozone") is the primary component of smog. In the Earth's lower atmosphere, near ground level, ozone is formed when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources react chemically in the presence of sunlight and heat.

Too little there…. CFCs, halon, and other such chemicals have damaged the earth's protective layer.

Too much here…. Air pollution emitted by various sources forms ground-level ozone, a particular component of smog.

Ozone Effects

HEALTH	POPULATION	ENVIRONMENT
Ozone's primary target is the lung. Exposure to ozone can:	**Four groups of people are particularly affected by ozone:**	**Ozone is injurious to nature because it can:**
Aggravate Asthma	Children	Alter ecosystem composition by eliminating essential organisms
Decrease lung capacity	People with respiratory diseases	Inhibit photosynthesis
Increase Hospital Visits	Adults who are active outdoors	Increase susceptibility of plants to insects and pathogens
Cause Eye, Throat Irritation	People unusually sensitive to ozone	Suppress plant growth
Inflame, Scar Lung Tissue		The economic impact of agricultural crop losses is an estimated $1 billion per year nationwide.
Impair Immune System Defenses		

Ozone Formation. Ozone is not emitted directly into the air, but is formed by a complex series of photochemical reactions involving two classes of precursor pollutants: nitrogen oxide (NOx) and volatile organic compounds (VOCs). These reactive chemicals combined with certain weather conditions primarily influence ozone formation.

Reactive Chemicals. Nitrogen Oxide (NO_2) is a photochemical oxidant primarily emitted from motor vehicles and other sources of combustion. In the presence of sunlight, this molecule breaks down into its component parts on nitric oxide (NO) and an atom of oxygen (O) in a process called *photolysis*. This oxygen atom (O) reacts with molecular oxygen (O_2), creating ozone (O_3). The O_3, in turn, reacts with NO to produce more NO_2 and O_2. Normally, this cycle reaches equilibrium.

However, in the presence of Volatile Organic Compounds (VOC) heavily emitted by industry, this equilibrium is upset and ozone levels are magnified. The highly reactive VOCs, including 1,3 butadiene, toluene, ethylene, and propylene, enter the photolytic nitrogen oxide cycle consumes available nitric oxide. As a result, the ozone accumulates in the atmosphere instead of being converted back to oxygen (O_2).

Weather. Since NOx only breaks down into its constituents in the presence of sunlight (i.e., photochemical), solar radiation significantly affects ozone formation. High temperature, low wind speed, and minimal cloud cover are additional weather conditions that encourage ozone formation and transport to neighboring urban and rural areas. Variations in local weather patterns contribute to yearly differences in ozone concentrations from city to city.

The following data was compiled by USEPA Office of Air and Radiation:

SOURCES OF NOx

- **56%** Motor Vehicle
- **22%** Utilities
- **17%** Industrial / Commercial / Residential Fuel Combustion
- **5%** All Other Sources

SOURCES OF VOC

- **50%** Industrial / Commercial Processes
- **45%** Motor Vehicles
- **5%** Consumer Solvents

Ozone Nonattainment. The summer months, particularly May through September, annually challenge the state of Louisiana with maintaining ozone levels established by the EPA. In the last two decades, ozone in the Baton Rouge Nonattainment Area (Ascension, East Baton Rouge, Iberville, Livingston and West Baton Rouge) has steadily declined as a result of deliberate actions to reduce ozone precursor emissions, as well as research and regulatory work done to understand the causes of ozone formation in the Area. While the average number of ozone exceedances in the Area has declined, as have the number of monitors exceeding the standard, the 5-parish Area remains out of compliance with the 1-hour and 8-hour National Ambient Air Quality Standard (NAAQS) promulgated by the US Environmental Protection Agency (EPA).

Under the 1990 amendments of the Clean Air Act, National Ambient Air Quality Standards (NAAQS) were set to maintain designated pollutants at levels sufficient to protect public health with an "adequate margin of safety." The NAAQS standard for ozone, one of six regulated "criteria pollutants," was changed from 0.124 parts per million (ppm) averaged over 1 hour to 0.08 parts per million averaged over 8 hours. All areas not meeting the standard are considered a "Nonattainment Area" and must reduce ozone emissions (not more than 0.124 ppm for 1-hour or 0.08 ppm for 8-hour). An area must not exceed the NAAQS standard more three times over a 3-year consecutive period. Despite statewide improvements, the Baton Rouge Area remains out of compliance with the one-hour NAAQS of 0.124 ppm.

Nonattainment areas are classified as **Marginal, Moderate, Serious, Severe or Extreme**, based on air quality as determined by monitoring data. The Baton Rouge Area was bumped up from the **SERIOUS** classification to **SEVERE** on June 23, 2003.

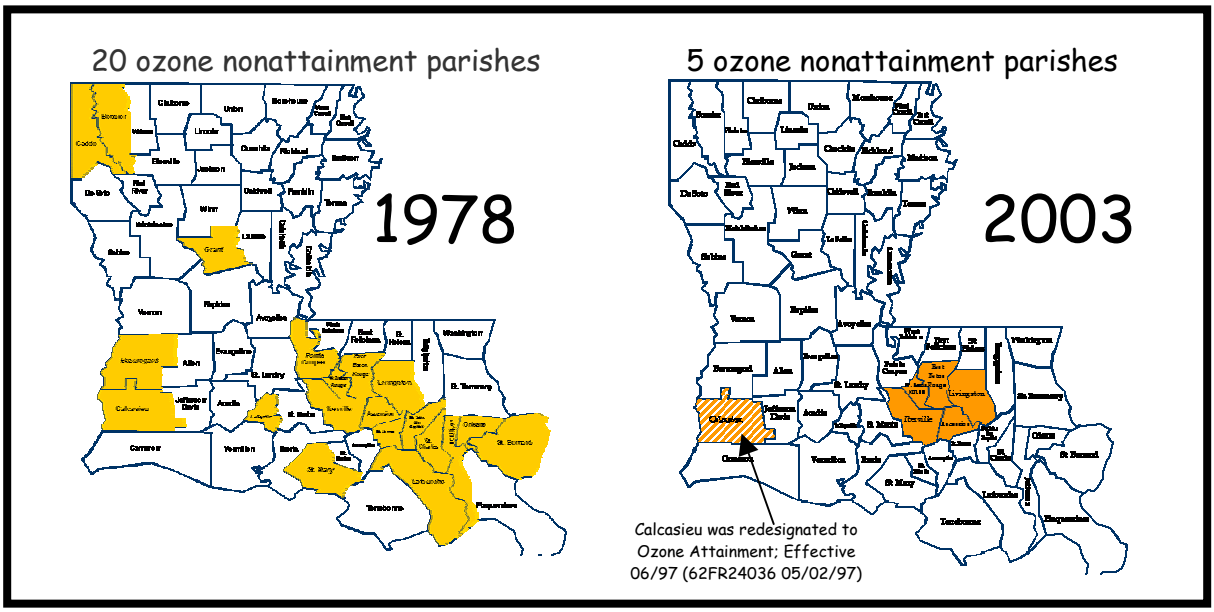


Figure 52-Ozone Attainment Progress in Louisiana. Over the last two decades, Louisiana has markedly decreased the number of nonattainment parishes statewide. To date, only the 5-parish Baton Rouge Area remains out of compliance with the national standard for ozone.

HRVOC Work Group. Recent ozone exceedances in the Baton Rouge area have been characterized by rapid, excessive ozone formation resulting in the highest levels experienced in a decade (more than 30% above the standard). Initial research suggested that this phenomenon might be the result of ozone precursors called "highly reactive" volatile organic compounds (HRVOC). Analysis of TRI release information, supported by EI and TEDI emissions data, indicated that indeed, ozone-forming HRVOC species such as ethylene, propylene, toluene, and butene were predominate among the chemicals emitted to air in the Baton Rouge area. Air monitoring data also supported this hypothesis.

In response to the summer 2002 and 2003 exceedances and the preliminary information gathered, the "HRVOC Work Group" was formed. The goal of the HRVOC Work Group is to further evaluate the specific causes of the ozone exceedances, design and oversee ozone-related studies, and implement solutions to help the area achieve Attainment status by November 2005. This group, composed of representatives from local industries, environmental organizations, EPA and LDEQ, was divided into 3 Subgroups: Data Analysis, Air Monitoring, and Emissions Inventory.

To more effectively define the problem, the Emissions Inventory subgroup spearheaded two special inventories requesting HRVOC-specific data from facilities, as well as emissions for two days before and the day of each exceedance in 2002 and 2003. Facilities that reported predetermined levels of HRVOC to the EI or TRI program in 2002 were targeted. The information obtained helped to determine which sources, processes, and specific HRVOC emissions predominately correlate to the 2002 and 2003 exceedances. Equipped with this information, the surveillance group at LDEQ has initiated in-depth facility inspections to proactively promote the implementation of alternatives to HRVOC-emitting processes and improve the air quality overall.

In addition, the Workgroup has devised a complete list of action items to help achieve attainment and ensure an event-free ozone season. The integrated plan for the 2004 Ozone Season includes the following priorities: expanding air-monitoring and ozone forecasting capabilities, establishing a central database to house ozone-related data, and performing statistical analyses on collected emissions and air monitoring data to identify trends in ozone formation.

"Do Your Share For Cleaner Air." This slogan was adopted by the Baton Rouge Clean Air Coalition to highlight the importance of citizen participation in reducing ozone, particularly in the Baton Rouge Nonattainment Area. During the warm summer months, when ozone formation is most likely, we must all do our share to help maintain a healthy ozone level. Suggestions are described below.

PROTECT YOUR ENVIRONMENT. . .

Industry	Government	Citizens
Reduce NOx- and VOC-releasing production activities	Monitor areas for ozone levels and encourage emission reduction	Limit daytime driving; carpool
Switch to cleaner burning fuels, low VOC solvents and paints	Publicize ozone alerts as needed	Mow lawn and refuel after 6 pm
Post-pone certain maintenance activities, painting, fleet refueling	Continue to improve ozone-related technology and procedures	Tightly seal gas caps and maintain vehicle
Use fleets to attend meetings	Support anti-ozone legislation	Conserve energy in your home

PROTECT YOURSELF…

Don't exercise outdoors in the afternoon or midday.

Avoid congested streets and rush hour traffic.

Be aware of the quality of the air you breathe (AQI Index).

SPREAD THE WORD!

Participate in OZONE ACTION DAYS.

Alert employees and provide Participation Incentives

Protect yourself and the environment, especially on OZONE ACTION DAYS.

"If each of us does our part to care for our air, we'll all breathe a little easier."
--US EPA

FOR MORE INFORMATION…

EPA Ozone Action Day http://www.epa.gov/reg5oair/naaqs/o3info.htm#steps
Ozone Pollution & Prevention http://www.deq.state.la.us/evaluation/ozone/
HRVOC Workgroup http://www.deq.state.la.us/evaluation/ozone/otcintro.htm

6.2--ENVIRONMENTAL LEADERSHIP PROGRAM

What is the Leadership Program? The Louisiana Environmental Leadership Program (LaELP) is a voluntary program sponsored by professional, environmental, industrial, and municipal associations. The Louisiana Department of Environmental Quality provides financial support for the program. Supplemental support for selected activities is provided by the sponsoring organizations. Any industrial facility, federal facility or parish/municipal governmental unit committed to improving the quality of Louisiana's environment through pollution prevention is eligible to join the program as a participating member.

To join the LaELP, a company commits to a set of environmental principles and standards and agrees to submit a brief pollution prevention plan containing voluntary waste reduction goals to LDEQ. The program has been active since March 1995.

LaELP Membership. By joining the program, companies are recognized by their neighbors as a company committed to maintaining and improving the quality of our environment. The Secretary of the LDEQ will acknowledge company participation by letter with an acknowledgment certificate. Companies can participate in periodic meetings, conferences and seminars sponsored by the Leadership Program to explore various pollution prevention opportunities and other environmental management issues. Companies can participate in the annual Governor's Awards for Outstanding Achievement in Pollution Prevention and Community Environmental Outreach. Awardees are recognized at a highly publicized ceremony hosted by the Governor.

Accepting the award from former Governor M.J. "Mike" Foster, are Marathon Ashland Petroleum staff members Terry Persaud (Environmental Engineer), Nicole Brien (Environmental Coordinator), Rich Bedell (Louisiana Refinery Manager), and Wally Dows (Environmental and Safety Engineer), as former DEQ Secretary Hall Bohlinger looks on.

Environmental Leadership Winners. Former Governor Mike Foster and former DEQ Secretary Hall Bohlinger presented this award to 12 facilities at the 2002 Governor's Environmental Leadership Awards ceremony held at the State Capitol on March 25, 2003. The following facilities were recognized for their initiative and excellence in pollution prevention, community outreach, and community involvement:

Air Products and Chemicals, St. Gabriel -- for implementing a design change which allows recycling of a heavy amines oil stream resulting in the reduction of 161,400 pounds per year of hazardous waste.

BASF Corporation, Geismar -- for an innovative project that recovers and reuses 50 metric tons of degraded catalyst in the Aniline Unit, which would have been otherwise landfilled.

Chevron Oronite Company, Oak Point Plant, Belle Chasse -- for improvement in the filtration step of the zinc additive manufacturing process whereby over five times more additive is filtered per batch resulting in 37% reduction of zinc lost in the filtration process.

DuPont Dow Elastomers, Pontchartrain Site, LaPlace -- for the reduction of 50,000 pounds per year of chloroprene air emissions through installation of a vapor balance vent collection header between eleven storage tanks and two railcar loading stations.

International Paper, Pineville Mill, Pineville -- for the modification of the Power Boiler with improvements to burn more biomass fuels (bark and agricultural residues) in lieu of natural gas. This conversion reduced particulate emissions (570 tons/year), nitrogen oxides (210 tons/year), and carbon monoxide (250 tons/year). It also reduced the amount of natural gas purchased by 20%.

Marathon Ashland Petroleum, Garyville -- for installation and the innovative operation of two electric-drive compressors which recover hydrogen sulfide from the vacuum distillation tower off-gas and other low pressure vent streams, thus reducing sulfur dioxide emissions by 8,000 pounds per year.

Monsanto Company, Luling -- By employing a "Six Sigma" approach it was determined that the amount of Glyphosate Intermediate lost in the crystallization unit could be reduced by operating the centrifuge at much lower pH. A recovery of 1.1 million pounds per year was achieved which would otherwise have been disposed of via deep well.

Motiva Enterprises, Norco Refinery, Norco -- for modification of a storm water retention pond to provide three parallel sedimentation basins, the construction of which included the reuse of 60,000 cubic yards of earthen materials. By providing for intermittent usage of the basins, the total suspended solids carried over into the effluent while cleaning a sedimentation basin is significantly reduced.

Rubicon Incorporated, Geismar -- for an innovative design of the Toluene Diisocyanate unit whereby a Recovery Column Overhead Dryer was installed between reactors to reduce water carry-forward. This reduced the generation of tars by 1.65 million pounds per year.

East Baton Rouge Parish Recycling Office, Baton Rouge -- for outstanding community leadership in recycling education and investing significant time and effort to establish and implement the America Recycles Day 2002 in East Baton Rouge Parish, Louisiana.

General Motors Corporation, Shreveport Assembly Plant, Shreveport -- for outstanding community leadership in the creation of the Global Rivers Environmental Education Network (GREEN) Program encouraging environmental education with hands-on field sampling of streams and lakes.

City of Shreveport, Department of Operational Services/Office of Environmental Affairs, Shreveport -- for outstanding community leadership shown in developing and implementing the Cross Lake Watershed Interactive CD and educational kiosk display targeting environmental education of middle school students and adults, and for the continuing commitment toward public awareness of the water shed and its importance to the protection of the city's water supply.

APPENDIX

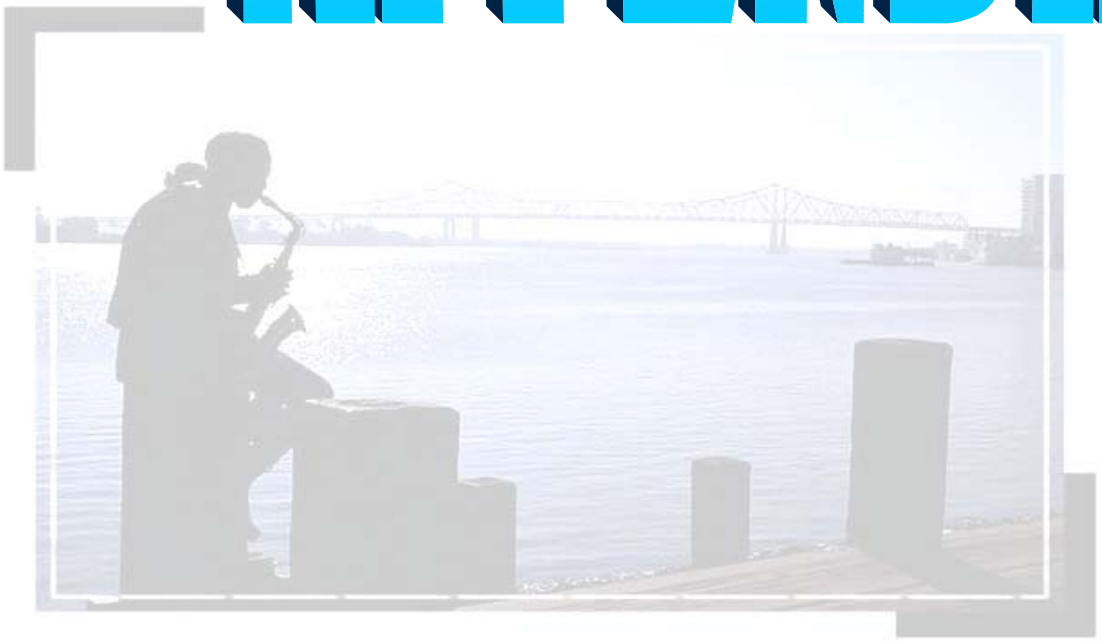


TABLE 1 - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
1	CYTEC INDUSTRIES, INC.	JEFFERSON	9,252,895
2	CF INDUSTRIES, INC.	ASCENSION	7,717,617
3	MONSANTO COMPANY	ST. CHARLES	7,584,858
4	ANGUS CHEMICAL COMPANY	OUACHITA	7,398,978
5	INTERNATIONAL PAPER, MANSFIELD	DE SOTO	6,460,520
6	RUBICON, INC.	ASCENSION	5,172,528
7	CHEMICAL WASTE MANAGEMENT	CALCASIEU	4,102,365
8	LOUISIANA PIGMENT COMPANY, L.P.	CALCASIEU	3,522,324
9	CLECO CORPORATION - DOLET HILLS	DE SOTO	3,333,076
10	EXXON MOBIL BATON ROUGE REFINERY	EAST BATON ROUGE	2,693,922
11	TRIAD NITROGEN, INC.	ASCENSION	2,592,690
12	BIG CAJUN 2	POINTE COUPEE	2,412,129
13	CROMPTON MFTG - GEISMAR	ASCENSION	2,396,138
14	INTERNATIONAL PAPER - LA MILL	MOREHOUSE	2,378,555
15	BOISE CASCADE CORPORATION	BEAUREGARD	1,988,899
16	EXXONMOBIL CHEMICAL COMPANY	EAST BATON ROUGE	1,967,809
17	BASF CORPORATION	ASCENSION	1,961,533
18	GAYLORD CONTAINER CORPORATION	WASHINGTON	1,834,423
19	IMC PHOSPHATES - FAUSTINA	ST. JAMES	1,693,754
20	THE DOW CHEMICAL COMPANY	IBERVILLE	1,691,776
21	CLEAN HARBORS PLAQUEMINE, L.L.C.	IBERVILLE	1,613,106
22	FIRESTONE POLYMERS	CALCASIEU	1,590,619
23	HONEYWELL INTERNATIONAL, INC.	EAST BATON ROUGE	1,500,762
24	CITGO PETROLEUM CORPORATION	CALCASIEU	1,444,265
25	PCS NITROGEN FERTILIZER, L.P.	ASCENSION	1,425,420
26	CHALMETTE REFINING, L.L.C.	ST. BERNARD	1,416,188
27	RIVERWOOD INTERNATIONAL	OUACHITA	1,365,585
28	KAISER ALUMINUM AND CHEMICAL	ST. JAMES	1,332,722
29	SYNGENTA CROP PROTECTION, INC.	IBERVILLE	1,276,079
30	STONE CONTAINER CORPORATION	JACKSON	1,193,256
31	INTERNATIONAL PAPER	RAPIDES	1,171,197
32	WILLAMETTE INDUSTRIES, INC.	NATCHITOCHES	1,132,600
33	MOTIVA ENTERPRISES, L.L.C. - CONVENT	ST. JAMES	1,129,601
34	UNION CARBIDE CORPORATION	ST. CHARLES	1,017,663
35	EXXON CHEMICAL COMPANY	EAST BATON ROUGE	947,071
36	CONOCOPHILLIPS LAKE CHARLES	CALCASIEU	934,337
37	CONAGRA BROILER COMPANY	UNION	879,328
38	GEORGIA PACIFIC CORPORATION	EAST BATON ROUGE	862,569
39	TEMBEC USA, L.L.C.	WEST FELICIANA	786,058
40	VULCAN MATERIALS COMPANY	ASCENSION	731,516
41	SHELL NORCO CHEMICAL PLANT - EAST SITE	ST. CHARLES	730,152
42	DSM COPOLYMER, INC.	WEST BATON ROUGE	711,345
43	CALUMET LUBRICANTS CO SHREVEPORT	CADDO	586,532
44	GEORGIA GULF CORPORATION	IBERVILLE	566,866
45	PPG INDUSTRIES, INC.	CALCASIEU	563,419

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL
46	CONOCOPHILLIPS COMPANY	PLAQUEMINES	562,195
47	WESTLAKE PETROCHEMICALS, L.P.	CALCASIEU	558,137
48	SID RICHARDSON CARBON	WEST BATON ROUGE	557,627
49	UOP - SHREVEPORT PLANT	CADDO	521,718
50	CONAGRA BROILER COMPANY	NATCHITOCHES	511,273
51	MOTIVA - NORCO REFINERY	ST. CHARLES	478,371
52	CROMPTOM CORPORATOIN TAFT FACILITY	ST. CHARLES	467,720
53	BUNGE CORPORATION	ST. CHARLES	464,119
54	OCCIDENTAL CHEMICAL CORPORATION	ST. CHARLES	451,305
55	DUPONT DOW ELASTOMERS, L.L.C.	ST. JOHN THE BAPTIST	439,770
56	SHELL CHEMICAL COMPANY	ASCENSION	433,298
57	DU PONT PONTCHARTRAIN WORKS	ST. JOHN THE BAPTIST	428,628
58	WESTLAKE POLYMERS, L.P. - 1 & II UN	CALCASIEU	426,632
59	SHELL NORCO CHEMICAL PLANT - WEST SITE	ST. CHARLES	398,665
60	US DOD US ARMY JRTC	VERNON	393,076
61	MURPHY OIL USA, INC.	ST. BERNARD	387,742
62	WILLIAMS OLEFINS, L.L.C. - GEISMAR	ASCENSION	360,253
63	RODEMACHER POWER STATION	RAPIDES	324,321
64	SASOL NORTH AMERICA LAKE CHARLES	CALCASIEU	321,816
65	HONEYWELL INTERNATIONAL, INC.	ASCENSION	304,873
66	GMTG SHREVEPORT ASSEMBLY PLANT	CADDO	300,991
67	LYONDELL CHEMICAL	CALCASIEU	287,182
68	ENTERGY - ROY S. NELSON	CALCASIEU	265,350
69	WEYERHAEUSER CO - ARCADIA	LINCOLN	234,619
70	IMC PHOSPHATES - UNCLE SAM	ST. JAMES	231,844
71	VENTURE COKE COMPANY, L.L.C.	CALCASIEU	227,627
72	SANDERSON FARMS, INC.	TANGIPAHOA	209,730
73	MARATHON ASHLAND PETROLEUM, L.L.C.	ST. JOHN THE BAPTIST	190,037
74	CYPRESS POLYPROPYLENE PLANT	ST. CHARLES	180,339
75	COSMAR COMPANY	IBERVILLE	172,874
76	TAYLORTEC, INC.	TANGIPAHOA	144,312
77	KOCH NITROGEN COMPANY	OUACHITA	144,051
78	ORION REFINING CORPORATION	ST. CHARLES	140,278
79	DSM COPOLYMER	EAST BATON ROUGE	136,409
80	CABOT CORP VILLE PLATTE PLANT	EVANGELINE	130,388
81	AIR PRODUCTS	ORLEANS	129,832
82	NORTHROP GRUMMAN	JEFFERSON	129,198
83	PINNACLE POLYMERS	ST. JOHN THE BAPTIST	129,085
84	RESOLUTION PERFORMANCE PRODUCT	ST. CHARLES	126,299
85	W.R. GRACE & COMPANY - CONN.	CALCASIEU	121,311
86	CABOT CORPORATION - CANAL PLANT	ST. MARY	112,402
87	EXIDE CORPORATION - BR SMELTER	EAST BATON ROUGE	110,260
88	VALERO REFINING	ST. LANDRY	104,672
89	CHEVRON PHILLIPS CHEMICAL COMPANY	ST. JAMES	99,156
90	DEGUSSA CORPORATION IVANHOE	ST. MARY	96,744

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
91	FORMOSA PLASTICS CORPORATION	EAST BATON ROUGE	93,697
92	DU PONT BURNSIDE PLANT	ASCENSION	90,874
93	CS METALS OF LOUISIANA, L.L.C.	ST. JAMES	88,036
94	RHODIA	EAST BATON ROUGE	84,820
95	WEYERHAEUSER - LILLIE DIVISION	UNION	80,169
96	SHAW SUNLAND FABRICATORS, INC.	LIVINGSTON	78,234
97	BASELL USA, INC.	CALCASIEU	77,245
98	BORDEN CHEMICALS, INC.	ASCENSION	74,000
99	WESTLAKE PETROCHEMICALS	CALCASIEU	70,968
100	VIVIAN INDUSTRIES VIP, INC.	CADDO	66,223
101	WEYERHAEUSER - SUREPINE PARTICLE	LINCOLN	65,716
102	SPRINGHILL WOOD PRODUCTS	WEBSTER	60,254
103	SIGMA COATINGS USA B.V.	JEFFERSON	59,341
104	GEISMAR VINYLS COMPANY	ASCENSION	48,625
105	BOLLINGER CALCASIEU, L.L.C.	CALCASIEU	47,605
106	TOPSIDE FABRICATION	IBERIA	47,480
107	LAKE CHARLES CARBON COMPANY	CALCASIEU	47,168
108	WEYERHAEUSER CO - DODSON	WINN	46,255
109	J. RAY MCDERMOTT, INC.	ASSUMPTION	46,048
110	ECOLOGICAL TANKS, INC.	OUACHITA	43,753
111	AIR PRODUCTS CHEM	IBERVILLE	42,220
112	CP LOUISIANA, INC.	JEFFERSON	41,733
113	DELTA ENVIRONMENTAL PRODUCTS	LIVINGSTON	41,170
114	ROYAL FIBERGLASS POOLS, INC.	ST. MARTIN	40,500
115	WEYERAEUSER - ZWOLLE	SABINE	38,879
116	OMEGA PROTEIN, INC.	CAMERON	38,230
117	OMEGA NATCHIQ, INC.	IBERIA	37,133
118	SHAW ALLOY PIPING PRODUCTS, INC.	CADDO	36,802
119	DELTECH CORPORATION	EAST BATON ROUGE	36,327
120	ONDEO NALCO CHEMICAL COMPANY	ST. JOHN THE BAPTIST	36,097
121	TEMPLE - INLAND FOREST PRODUCTS	BEAUREGARD	35,800
122	BOLLINGER SHIPYARDS LOCKPORT	LAFOURCHE	35,225
123	AMITE FOUNDRY & MACHINE, INC.	TANGIPAHOA	35,099
124	GEORGIA PACIFIC, URANIA COMPLEX	LA SALLE	32,239
125	EXXON CHEMICAL AMERICAS BR POLYOLEFINS	EAST BATON ROUGE	31,905
126	SPECTRUM CONTROL TECH., INC.	ORLEANS	31,652
127	PRAXAIR, INC. - GEISMAR	ASCENSION	30,412
128	BEAIRD INDUSTRIES	CADDO	29,231
129	PLACID REFINING COMPANY	WEST BATON ROUGE	29,000
130	INEOS FLUOR AMERICAS, L.L.C.	IBERVILLE	28,693
131	BIOLAB, INC.	CALCASIEU	28,620
132	GRANT CHEMICAL - DIV. OF FERRO	EAST BATON ROUGE	28,504
133	MEADWESTVACO SOUTH CAROLINA	BEAUREGARD	28,435
134	WEATHERFORD GEMOCO	TERREBONNE	28,156
135	LOCKHEED MARTIN	ORLEANS	28,102

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
136	CHEVRON ORONITE CORPORATION	PLAQUEMINES	26,876
137	LOUISIANA BLASTING AND COATING	IBERIA	26,771
138	GULF ISLAND, L.L.C.	TERREBONNE	26,094
139	BOLLINGER GULF REPAIR, L.L.C.	ORLEANS	25,772
140	EDO SPECIALTY PLASTICS	EAST BATON ROUGE	25,300
141	SHAW SSS FABRICATORS, INC.	WEST BATON ROUGE	25,138
142	SHAW PROCESS FABRICATORS	OUACHITA	24,877
143	CALUMET LUBRICANTS	WEBSTER	24,586
144	EVANS HARVEY, INC.	JEFFERSON	23,628
145	WESTLAKE STYRENE, L.P. - MARINE TERMINAL	CALCASIEU	23,373
146	THE DOW CHEMICAL COMPANY	ASSUMPTION	22,839
147	AIR PRODUCTS & CHEMICALS, INC.	ASCENSION	22,001
148	SHINTECH LOUISIANA, L.L.C.	WEST BATON ROUGE	20,474
149	INTERNATIONAL PAINTING CORPORATION	WEST BATON ROUGE	19,992
150	SOUTHERN MANUFACTURING COMPANY	CAMERON	19,708
151	COLUMBIAN CHEMICALS COMPANY	ST. MARY	19,440
152	SKAGIT SMATCO	TERREBONNE	18,742
153	BAYOU STEEL CORPORATION	ST. JOHN THE BAPTIST	17,634
154	ST. JAMES TERMINAL	ST. JAMES	17,269
155	ATOFINA	IBERVILLE	16,976
156	BOLLINGER MARINE FABRICATORS	ST. MARY	16,326
157	TRINITY MARINE PORT ALLEN	WEST BATON ROUGE	15,836
158	SUPERIOR TIE AND TIMBER	CADDO	15,761
159	BIOPRODUCTS OF LOUISIANA, L.L.C.	IBERVILLE	15,229
160	WESTLAKE STYRENE, L.P.	CALCASIEU	14,970
161	MELAMINE CHEMICALS, INC.	ASCENSION	14,569
162	GRAND ISLE SHIPYARD	JEFFERSON	14,500
163	GEORGIA GULF LAKE CHARLES, L.L.C.	CALCASIEU	14,377
164	NATCO - NEW IBERIA MANUFACUTRING	IBERIA	13,250
165	INEOS OXIDE COMPANY	IBERVILLE	13,212
166	4-D CORROSION CONTROL SPECIALITY	IBERIA	13,000
167	OCCIDENTAL CHEM CORPORATION	ST. JAMES	12,892
168	DURAWOOD TREATING COMPANY	RAPIDES	12,039
169	GENERAL ELECTRIC COMPANY	CADDO	11,693
170	OMEGA PROTEIN, INC.	VERMILION	11,211
171	GUIDE LOUISIANA, L.L.C.	OUACHITA	10,868
172	SHELL CHEMICAL - ST. ROSE FACILITY	ST. CHARLES	10,808
173	EXXON MOBIL CHEM COMPANY	EAST BATON ROUGE	9,847
174	COLFAX TREATING COMPANY	RAPIDES	9,713
175	JEFFERSON FIBERGLASS COMPANY, INC.	JEFFERSON	9,500
176	CMP COATINGS, INC.	PLAQUEMINES	8,163
177	TUBOSCOPE VETCO - AMELIA	ASSUMPTION	8,011
178	STARLING, INC.	LIVINGSTON	7,824
179	CARBOLINE COMPANY	CALCASIEU	7,564
180	BOLLINGER LAROSE, L.L.C.	LAFOURCHE	7,465
181	ENTERPRISE PRODUCTS OPERATING	WEST BATON ROUGE	7,380

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
182	WEYERHAEUSER - SIMSBORO EWP	LINCOLN	7,332
183	RESIN SYSTEMS, INC.	CALCASIEU	7,174
184	BOLLINGER GRETNA, L.L.C.	JEFFERSON	6,798
185	AVIATION EXTERIORS LOUISIANA	IBERIA	6,638
186	CALCASIEU REFINING COMPANY	CALCASIEU	6,422
187	ALBEMARLE CORPORATION PROCESS	EAST BATON ROUGE	6,075
188	ASCO - US FOURCHON 16	LAFOURCHE	5,777
189	COMPLEX CHEMICALS CO., INC.	MADISON	5,740
190	UNITED STATES MARINE, INC.	ORLEANS	5,246
191	ORLEANS MARBLE, INC.	JEFFERSON	5,000
192	BORDEN, INC. DAIRY DIVISION	LAFAYETTE	4,841
193	STOCKHAUSEN LOUISIANA, LTD.	ST. JOHN THE BAPTIST	4,689
194	DYNEA USA INC. (NESTE RESINS)	WINN	4,575
195	KENNER TERMINAL (MOTIVA)	JEFFERSON	4,373
196	ASCO - US CAMERON 06	CAMERON	4,010
197	MARTCO PARTNERSHIP - CHOPIN	NATCHITOCHES	3,961
198	MICRO CHEMICAL COMPANY	FRANKLIN	3,854
199	GULF COAST CHEMICAL, INC.	VERMILION	3,800
200	ECLECTIC PRODUCTS, INC.	RAPIDES	3,767
201	ST. MARTIN OIL AND GAS, INC.	ST. MARTIN	3,750
202	ARCH CHEMICALS INCORPORATED	CALCASIEU	3,718
203	PPG GROW BATON ROUGE	EAST BATON ROUGE	3,641
204	COASTAL CHEMICAL COMPANY, L.L.C.	VERMILION	3,613
205	ASCO - US VENICE	PLAQUEMINES	3,470
206	IMC - PHOSPHATES, INC. TAFT PLANT	ST. CHARLES	3,181
207	INTERCONTINENTAL TERMINALS	WEST BATON ROUGE	3,150
208	CHEMCENTRAL/NEW ORLEANS	JEFFERSON	3,150
209	AMERCHOL CORPORATION	ST. HELENA	3,056
210	FLINT INK NORTH AMERICA CORPORATION	OUACHITA	3,000
211	BOLLINGER QUICK REPAIR, INC.	JEFFERSON	3,000
212	TETRA CHEMICALS, INC.	CALCASIEU	2,951
213	AIR LIQUIDE	IBERVILLE	2,950
214	MARATHON OIL COMPANY - TERMINAL	ST. JOHN THE BAPTIST	2,905
215	ARCH CHEMICALS, INC.	CADDO	2,814
216	CYPRESS CATALYST PLANT	ST. CHARLES	2,792
217	THE MARBLE QUARRY, INC.	ST. TAMMANY	2,706
218	CERTAINTEED CORPORATION	CALCASIEU	2,605
219	MAGNOLIA CHEMICALS AND SOLVENT	JEFFERSON	2,580
220	NEW ORLEANS SHIPYARD	JEFFERSON	2,533
221	BAKER PETROLITE - RAYNE FACILITY	ACADIA	2,523
222	CLEAN HARBORS	EAST BATON ROUGE	2,449
223	JOTUN PAINTS	PLAQUEMINES	2,250
224	VALENTINE PAPER, INC.	LAFOURCHE	2,220
225	BAKER MANUFACTURING	RAPIDES	2,189
226	EXIDE CORPORATION	CADDO	2,145
227	PRAXAIR DISTRIBUTION, INC.	ST. CHARLES	2,090

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
228	KOPPERS INDUSTRIES, INC.	DE SOTO	2,063
229	PIONEER AMERICAS, L.L.C.	IBERVILLE	2,038
230	WESTSIDE GALVANIZING SERVICES	WEST BATON ROUGE	1,951
231	SHAW SHREVEPORT	CADDO	1,826
232	SCI FABRICATION SHOP	ASCENSION	1,815
233	BORDEN CHEMICAL & PLASTICS	WEST BATON ROUGE	1,803
234	TRINITY MARINE - MADISONVILLE	ST. TAMMANY	1,792
235	CATALYST RECOVERY OF LOUISIANA	LAFAYETTE	1,787
236	UNIVAR USA	LAFAYETTE	1,764
237	BORDEN CHEMICAL, INC.	RAPIDES	1,748
238	CALUMET LUBRICANTS COMPANY	BOSSIER	1,719
239	TOMAH RESERVE, INC.	ST. JOHN THE BAPTIST	1,709
240	NALCO/EXXON ENERGY CHEMICAL	LAFAYETTE	1,400
241	BIG RIVER INDUSTRIES - GRAVELITE	POINTE COUPEE	1,335
242	BRENNTAG SOUTHWEST, INC.	IBERVILLE	1,320
243	PEARL RIVER POLYMERS	ST. TAMMANY	1,261
244	TRUS JOIST MACMILLAN	NATCHITOCHES	1,250
245	X-CHEM, INC.	JEFFERSON	1,220
246	OCCIDENTAL CHEMICAL CORPORATION	ST. CHARLES	1,213
247	DYNEGY MIDSTREAM SERVICES	PLAQUEMINES	1,152
248	HOBSON GALVANIZING	PLAQUEMINES	1,072
249	FRYMASTER CORPORATION	CADDO	1,037
250	STEEL FORGINGS, INC.	CADDO	1,000
251	CHEVRONTEXACO USED OIL RECYCLING	JEFFERSON	1,000
252	ARIZONA CHEMICAL	ALLEN	912
253	DEEP SOUTH PETROLEUM	LAFAYETTE	910
254	HAYWILK GALVANIZING, INC.	JEFFERSON	850
255	SHELL CHEMICAL COMPANY - TAFT PLANT	ST. CHARLES	822
256	DEEP SOUTH CHEMICAL, INC.	LAFAYETTE	800
257	SII CHEM TECH (SMITH INTL.)	LAFAYETTE	770
258	ESGARD, INC. - DEBONNAIRE RD.	LAFAYETTE	750
259	LIBBEY GLASS, INC.	CADDO	672
260	BERCEN, INC.	LIVINGSTON	637
261	HAYNES INTERNATIONAL, INC.	BIENVILLE	576
262	DPC	ST. JOHN THE BAPTIST	543
263	PUMPELLY OIL COMPANY	CALCASIEU	500
264	ST. MARY GALVANIZING COMPANY	ST. MARY	498
265	MARTCO PARTNERSHIP	ST. LANDRY	422
266	NEXEN	ST. CHARLES	388
267	SAINT - GOBAIN CONTAINERS	LINCOLN	357
268	OAKDALE PLYWOOD PLANT	ALLEN	337
269	FLORIEN PLYWOOD PLANT	SABINE	332
270	KEMIRA CHEMICALS, INC.	CADDO	303
271	EVANS HARVEY CORPORATION	JEFFERSON	280
272	TIFTON ALUMINUM COMPANY	RICHLAND	272

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
273	KIK (LOUISIANA), INC.	ST. TAMMANY	268
274	ALPHA OMEGA LASER, INC.	CADDO	250
275	INLAND PAPERBOARD AND PACKAGING	WEBSTER	250
276	PENNZOIL PRODUCTS COMPANY	CADDO	250
277	PENNZOIL - QUAKER STATE COMPANY	CADDO	250
278	CROMPTON CORPORATION	JEFFERSON	250
279	STOWE WOODWARD COMPANY	LINCOLN	206
280	SOUTHERN IONICS, INC.	CALCASIEU	202
281	GREAT LAKES CARBON CORPORATION	EAST BATON ROUGE	193
282	GEORGIA PACIFIC CORPORATION	DE SOTO	183
283	FMC CORPORATION	ST. LANDRY	151
284	ONDEO NALCO CHEMICAL COMPANY	WEST BATON ROUGE	141
285	UNIVAR USA	ASCENSION	134
286	POLY ONE	IBERVILLE	132
287	ROHM AND HAAS	IBERIA	128
288	PROCTER & GAMBLE MANUFACTURING	RAPIDES	120
289	DIS-TRAN PRODUCTS, INC.	RAPIDES	88
290	HARCROS CHEMICALS, INC.	IBERVILLE	34
291	ELDER WOOD PRESERVING, INC.	AVOYELLES	30
292	BARRIERE CONSTRUCTION CO, L.L.C.	ST. CHARLES	29
293	HOOD INDUSTRIES, INC.	RED RIVER	26
294	WILLAMETTE VALLEY COMPANY	RAPIDES	24
295	DELTA PETROLEUM COMPANY, INC.	JEFFERSON	15
296	DELTA PETROLEUM CO., INC.	ST. CHARLES	11
297	SCHERING - PLOUGH VETERINARY	EAST BATON ROUGE	10
298	EAST JORDAN IRON WORKS, INC.	LIVINGSTON	10
299	DISCOVERY ALUMINAS	WEST BATON ROUGE	9
300	AMPACET CORPORATION	BEAUREGARD	9
301	CERRO COPPER TUBE	BOSSIER	7
302	US GYPSUM COMPANY	ORLEANS	6
303	BALMAR, L.L.C.	LAFAYETTE	6
304	DRISCOLL MANAGEMENT, L.L.C.	EAST BATON ROUGE	5
305	MCKINNEY OIL COMPANY	MADISON	5
306	BARKSDALE AFB LA	BOSSIER	4
307	GAYLORD CHEMICAL CORPORATION	WASHINGTON	3
308	BOLLINGER ALGIERS, L.L.C.	ORLEANS	2
309	HALLIBURTON ENERGY SERVICES	LAFAYETTE	2
310	SAFETY KLEEN SYSTEMS	RAPIDES	1
311	CIBA SPECIALTY CHEMICALS CORPORATION	IBERVILLE	1
312	HUGHES CHRISTENSEN LAFAYETTE	LAFAYETTE	1
313	NEW NGC, INC.	JEFFERSON	1
314	ACME BRICK	BIENVILLE	0
315	ACME ROMAC, INC.	DE SOTO	0
316	AIR LIQUIDE AMERICA CORPORATION	ST. CHARLES	0
317	ALCOA INDUSTRIES	CONCORDIA	0
318	ALLIANCE COMPRESSORS	NATCHITOCHES	0

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
319	AMAX METALS RECOVERY, INC.	PLAQUEMINES	0
320	ARNOLD FOREST PRODUCTION	CADDO	0
321	ASSOCIATED PRINTING, INC.	BOSSIER	0
322	ATHENS CADDO BRICK	CADDO	0
323	BARNES HARDWOOD, INC. - SONDHEIMER	EAST CARROLL	0
324	BARNES HARDWOOD, INC. - SIMSBORO	LINCOLN	0
325	BODY MASTERS SPORTS INDUSRTY	ACADIA	0
326	BOISE CASCADE ALEXANDRIA EWP	RAPIDES	0
327	CADDO PAINT COMPANY, INC.	CADDO	0
328	CAMECO INDUSTRIES - THIBODAUX FACILITY	LAFOURCHE	0
329	CAMERON	EVANGELINE	0
330	CAPITOL MANUFACTURING COMPANY	ACADIA	0
331	CAPITOL STEEL	ST. TAMMANY	0
332	CAPITOL STEEL, INC.	EAST BATON ROUGE	0
333	CASTROL NORTH AMERICA, INC.	WEST BATON ROUGE	0
334	CENTRAL OIL AND SUPPLY	OUACHITA	0
335	CONAGRA BROILER COMPANY	BIENVILLE	0
336	CONAGRA BROILER COMPANY - FEEDMILL	SABINE	0
337	CRYSTAL CLEAN SERVICES, L.L.C.	CADDO	0
338	DATACHEM, INC.	ST. JOHN THE BAPTIST	0
339	DAYBROOK FISHERIES, INC.	PLAQUEMINES	0
340	EXXON PORT ALLEN LUBRICANTS	WEST BATON ROUGE	0
341	FARMLAND INDUSTRIES, INC.	GRANT	0
342	FHP (UNR HOME PRODS)	LINCOLN	0
343	GANDY TIE AND TIMBER, L.L.C.	SABINE	0
344	GAUBERT OIL COMPANY, INC.	LAFOURCHE	0
345	GULF COAST LUBES PLANT	CALCASIEU	0
346	HENDRIX MANUFACTURING COMPANY, INC.	DE SOTO	0
347	KENCOIL, INC.	PLAQUEMINES	0
348	LARD OIL COMPANY	LIVINGSTON	0
349	LOTT OIL COMPANY - BOSSIER	BOSSIER	0
350	LOTT OIL COMPANY - LEESVILLE	VERNON	0
351	LOTT OIL COMPANY - MANSFIELD	DE SOTO	0
352	LOTT OIL COMPANY - MANY	SABINE	0
353	LOTT OIL COMPANY - NATCHITOCHES	NATCHITOCHES	0
354	MAGNOLIA CHEMICALS AND SOLVENT	LAFAYETTE	0
355	MARIAH CORPORATION, INC.	LAFAYETTE	0
356	MID - STATES WOOD PRESERVERS	LINCOLN	0
357	NAN YA PLASTICS CORPORATION	POINTE COUPEE	0
358	NEXAIR, L.L.C.	OUACHITA	0
359	NORTHWEST PIPE COMPANY	BOSSIER	0
360	OHMSTEDE, INC.	IBERVILLE	0
361	OHMSTEDE, INC.	CALCASIEU	0
362	ORMET CORPORATION	ASCENSION	0
363	OUACHITA COCA-COLA	OUACHITA	0
364	PLYMOUTH TUBE COMPANY	OUACHITA	0

TABLE 1 (continued) - 2002 TRI RELEASES BY FACILITY (in Pounds)			
RANK	FACILITY	PARISH	TOTAL (on-site)
365	PURINA MILLS, INC.	TANGIPAHOA	0
366	PURINA MILLS, INC.	CADDO	0
367	QPL, INC.	LAFOURCHE	0
368	RICHARD OIL & FUEL, INC.	ASCENSION	0
369	SHELL OIL PRODUCTS	JEFFERSON	0
370	SILCO DBA ELCO FOREST PRODUCTS	ST. LANDRY	0
371	ST. ROMAIN OIL COMPANY	AVOYELLES	0
372	STEEL FABRICATORS OF MONROE	OUACHITA	0
373	TWIN BROTHERS MARINE, L.L.C.	ST. MARY	0
374	UNIVERSAL FABRICATOR, L.L.C.	IBERIA	0
375	WATERBURY COMPANIES, INC.	TANGIPAHOA	0
376	WECHEM, INC.	JEFFERSON	0

TABLE 2 – 2002 TRI RELEASES BY CHEMICALS (in Pounds)

TRI CHEMICAL	RANK	# FACILITIES	AIR	WATER	LAND	INJECTION	ON-SITE	DISPOSAL	TOTAL
1,1,1,2-TETRACHLOROETHANE	169	3	1,070	0	0	0	1,070	82	1,152
1,1,1-TRICHLOROETHANE	64	4	151,670	46	1	0	151,717	17	151,734
1,1,2,2-TETRACHLOROETHANE	140	8	5,917	62	0	0	5,979	103	6,082
1,1,2,2-TETRACHLORO-1-FLUOREHTANE	209	1	25	5	0	0	30	0	30
1,1,2-TRICHLOROETHANE	107	9	19,300	1,179	15	0	20,494	134	20,628
1,1-DICHLORO-1,2,2-TRIFLUOR	187	1	400	0	0	0	400	0	400
1,1-DICHLORO-1-FLUOROETHANE	70	1	98,201	5	0	0	98,206	0	98,206
1,1-DIMETHYL HYDRAZINE	185	2	420	0	0	0	420	0	420
1,1-DICHLOROETHANE	68	7	102,904	85	80	0	103,069	12	103,081
1,2,3-TRICHLOROPROPANE	168	3	1,186	0	0	0	1,186	0	1,186
1,2,4-TRICHLOROBENZENE	220	2	3	0	0	0	3	7	10
1,2,4-TRIMETHYLBENZENE	61	47	182,844	133	133	13	183,123	1,728	184,851
1,2-BUTYLENE OXIDE	154	2	2,582	0	0	0	2,582	0	2,582
1,2-DIBROMOETHANE	163	1	1,693	0	0	0	1,693	0	1,693
1,2-DICHLORO-1,1,2-TRIFLUORETHANE	66	2	111,542	5	0	0	111,547	0	111,547
1,2-DICHLORO-1,1-DIFLUOROETHANE	208	1	25	5	0	0	30	0	30
1,2-DICHLOROBENZENE	131	1	1,469	0	0	8,700	10,169	99	10,268
1,2-DICHLOROETHANE	38	18	177,422	664	109	212,404	390,599	1,014	391,613
1,2-DICHLOROETHYLENE	104	5	23,816	0	0	0	23,816	15	23,831
1,2-DICHLOROPROPANE	137	5	5,738	788	38	0	6,564	1	6,565
1,2-PHENYLENEDIAMINE	190	1	375	0	0	0	375	0	375
1,3-BUTADIENE	62	26	176,200	121	1	0	176,322	0	176,322
1,3-DICHLORO-1,1,2,2,3-PENTAFLUOROPROPANE	132	1	9,300	0	0	0	9,300	0	9,300
1,3-DICHLOROPROPYLENE	142	3	5,344	28	0	0	5,372	0	5,372
1,4-DICHLORO-2-BUTENE	151	3	765	18	0	1,900	2,683	0	2,683
1,4-DIOXANE	112	4	3,783	14,658	0	0	18,441	3	18,444
1-CHLORO-1,1,2,2-TETRAFLUORETHANE	147	1	3,613	0	0	0	3,613	0	3,613
1-CHLORO-1,1-DIFLUOROETHANE	101	1	25,848	5	0	0	25,853	0	25,853
2,2-DICHLORO-1,1,1-TRIFLUORETHANE	89	3	52,618	5	0	0	52,623	0	52,623
2,3-DICHLOROPROPENE	200	2	83	0	0	0	83	0	83
2,4-D	236	1	0	0	0	0	0	0	0
2,4-DIMETHYLPHENOL	227	1	0	0	0	0	0	0	0
2,4-DINITROPHENOL	250	2	0	0	0	0	0	0	0
2-CHLORO-1,1,1,2-TETRAFLUORETHANE	77	2	68,667	5	0	0	68,672	0	68,672
2-CHLORO-1,1,1-TRIFLUOROETHANE	138	2	6,353	0	0	0	6,353	0	6,353
2-ETHOXYETHANOL	177	1	45	516	0	0	561	0	561
2-MERCAPTOBENZOTHIAZOLE	121	1	3,586	0	0	12,318	15,904	0	15,904
2-METHOXYETHANOL	150	2	1,473	1,392	0	0	2,865	0	2,865
2-NITROPHENOL	196	2	44	63	0	0	107	413	520
2-NITROPROPANE	109	1	18,899	258	0	0	19,157	0	19,157
3,3-DICHLORO-1,1,1,2,2-PENTAFLUOROPROPANE	128	1	11,000	0	0	0	11,000	0	11,000
4,4'-ISOPROPYLIDENEDIPHENOL	178	6	91	440	15	0	546	4,276	4,822
4,4'-METHYLENEDIANILINE	85	2	1,468	0	0	57,000	58,468	80	58,548
4,6-DINITRO-O-CRESOL	203	1	62	0	0	0	62	0	62
4-AMINOAZOBENZENE	207	1	0	0	0	31	31	0	31
4-AMINOBIPHENYL	221	1	0	0	0	3	3	0	3
4-NITROPHENOL	176	1	581	0	0	0	581	0	581
ACETALDEHYDE	22	18	767,081	22,405	1,637	316,482	1,107,605	8	1,107,613
ACETONITRILE	11	9	42,160	589	0	2,796,326	2,839,075	0	2,839,075
ACIFLUORFEN SODIUM SALT	245	1	0	0	0	0	0	0	0
ACROLEIN	155	3	2,531	0	0	0	2,531	0	2,531

TABLE 2 (continued) – 2002 TRI RELEASES BY CHEMICALS (in Pounds)

TRI CHEMICAL	RANK	# FACILITIES	AIR	WATER	LAND	INJECTION	ON-SITE	DISPOSAL	TOTAL
ACRYLAMIDE	19	2	256	17	0	1,393,242	1,393,515	1,530	1,395,045
ACRYLIC ACID	120	7	11,807	4,461	0	0	16,268	7,770	24,038
ACRYLONITRILE	52	7	14,297	23	0	237,975	252,295	39	252,334
ALLYL ALCOHOL	83	4	15,721	5,500	0	42,115	63,336	0	63,336
ALLYL CHLORIDE	127	5	11,083	0	3	0	11,086	0	11,086
ALUMINUM (FUME OR DUST)	148	4	3,157	409	13	0	3,579	0	3,579
AMETRYN	215	1	0	8	0	0	8	0	8
AMMONIA	1	74	14,299,092	651,775	4,607	4,115,225	19,070,699	73,271	19,143,970
ANILINE	32	9	41,157	0	10,000	481,722	532,879	80	532,959
ANTHRACENE	186	9	312	100	3	0	415	179	594
ANTIMONY	81	3	77	619	64,000	0	64,696	968	65,664
ANTIMONY COMPOUNDS	82	8	1,067	518	62,384	0	63,969	52,569	116,538
ARSENIC	111	2	5	5	0	18,529	18,539	298	18,837
ARSENIC COMPOUNDS	94	7	1,410	267	40,628	0	42,305	22	42,327
ASBESTOS (FRIABLE)	18	9	2	0	1,556,122	0	1,556,124	95,524	1,651,648
ATRAZINE	118	1	16,272	532	0	295	17,099	3,293	20,392
ACETOPHENONE	166	1	1,419	0	0	0	1,419	0	1,419
BARIUM	113	1	0	0	0	18,441	18,441	47	18,488
BARIUM COMPOUNDS	8	17	86,011	45,085	3,612,254	593	3,743,943	33,164	3,777,107
BENZENE	25	61	557,322	1,144	140	223,698	782,304	9,370	791,674
BENZO (GHI) PERYLENE	170	32	969	10	19	0	999	8,463	9,462
BENZOYL CHLORIDE	193	3	312	0	0	0	312	0	312
BENZYL CHLORIDE	204	3	52	0	0	0	52	0	52
BERYLLIUM	242	1	0	0	0	0	0	0	0
BIFENTHRIN	238	1	0	0	0	0	0	0	0
BIPHENYL	158	8	2,244	42	12	0	2,298	133	2,431
BIS(2-CHLORO-1-METHYLETHYL)	164	1	1,601	0	2	0	1,603	0	1,603
BIS(2-CHLOROETHYL) ETHER	206	3	33	1	0	0	34	6	40
BIS(CHLOROMETHYL) ETHER	233	1	0	0	0	0	0	0	0
BORON TRIFLUORIDE	241	3	0	0	0	0	0	0	0
BROMINE	175	4	758	0	0	0	758	0	758
BROMOFORM	182	1	0	456	0	0	456	0	456
BROMOMETHANE	217	2	0	1	4	0	5	0	5
BUTYL ACRYLATE	149	4	3,016	51	0	0	3,067	0	3,067
BUTYRALDEHYDE	135	1	8,260	0	0	0	8,260	0	8,260
CADMIUM	105	2	0	0	1	22,650	22,651	58	22,709
CADMIUM COMPOUNDS	234	1	0	0	0	0	0	0	0
CARBOFURAN	195	1	146	5	0	0	151	0	151
CARBON DISULFIDE	26	18	667,406	0	0	4,997	672,403	3	672,406
CARBON TETRACHLORIDE	37	12	304,984	55	39	139,323	444,401	121	444,522
CARBONYL SULFIDE	39	15	386,627	0	0	0	386,627	0	386,627
CATECHOL	146	10	899	2,777	540	0	4,216	625	4,841
CHLORINE	40	75	329,200	39,984	1	0	369,185	481	369,666
CHLORINE DIOXIDE	108	6	19,918	0	0	0	19,918	0	19,918
CHLOROACETIC ACID	198	1	98	0	0	0	98	0	98
CHLOROBENZENE	35	9	371,112	29	0	95,030	466,171	87,894	554,065
CHLORODOFLUOROMETHANE	23	10	1,006,002	2,627	0	0	1,008,629	0	1,008,629
CHLOROETHANE	124	14	15,241	0	0	0	15,241	70,362	85,603
CHLOROFORM	56	12	56,485	5,818	11,901	142,052	216,256	193	216,449
CHLOROMETHANE	43	10	262,978	404	40	71,993	335,415	0	335,415
CHLOROPRENE	41	5	334,683	71	0	19,000	353,754	0	353,754
CHLOROTRIFLUOROMETHANE	115	2	17,769	5	0	0	17,774	0	17,774
CHROMIUM	75	34	1,936	107	28,613	26,874	57,530	15,718	73,248
CHROMIUM COMPOUNDS	69	20	2,079	1,045	95,657	0	98,781	26,489	125,270

TABLE 2 (continued) – 2002 TRI RELEASES BY CHEMICALS (in Pounds)									
TRI CHEMICAL	RANK	# FACILITIES	AIR	WATER	LAND	INJECTION	ON-SITE	DISPOSAL	TOTAL
COBALT	218	1	5	0	0	0	5	62	67
COBALT COMPOUNDS	73	17	383	6,213	68,930	6,772	82,298	69,120	151,418
COPPER	78	16	117	635	65,706	1,400	67,858	10,111	77,969
COPPER COMPOUNDS	44	35	6,463	14,937	312,337	1,675	335,412	249,960	585,372
CREOSOTE	96	5	39,411	113	5	0	39,529	1,420,400	1,459,929
CRESOL (MIXED ISOMERS)	59	14	43,332	1,965	4	145,274	190,575	2,434	193,009
CROTONALDEHYDE	251	1	0	0	0	0	0	0	0
CUMENE	91	20	45,632	114	2	13	45,761	146	45,907
CUMENE HYDROPEROXIDE	171	1	955	0	0	0	955	0	955
CYANAZINE	210	1	0	28	0	0	28	0	28
CYANIDE COMPOUNDS	33	4	0	95	1	503,907	504,003	0	504,003
CYCLOHEXANE	29	31	592,604	345	42	34,434	627,425	77	627,502
DECABROMODIPHENYL OXIDE	51	1	0	0	280,000	0	280,000	0	280,000
DI(2-ETHYLHEXYL) PHTHALATE	256	2	0	0	0	0	0	0	0
DIAMINOTOLUENE (MIXED ISOMERS)	133	3	6,150	168	0	2,600	8,918	19,317	28,235
DIAZINON	252	1	0	0	0	0	0	0	0
DIBUTYL PHTHALATE	226	2	1	0	0	0	1	0	1
DICHLOROBENZENE (MIXED ISOM	212	3	16	6	0	0	22	0	22
DICHLOROBROMOMETHANE	191	1	0	284	76	0	360	0	360
DICHLORODIFLUOROMETHANE	95	4	40,254	5	0	0	40,259	0	40,259
DICHLOROFLUOROMETHANE	153	1	2,614	5	0	0	2,619	0	2,619
DICHLOROMETHANE	93	10	31,903	136	29	10,342	42,410	187	42,597
DICHLOROTETRAFLUOROETHANE	86	2	56,685	5	0	0	56,690	0	56,690
DICYCLOPENTADIENE	103	9	23,658	180	0	0	23,838	0	23,838
DIETHANOLAMINE	129	14	10,511	478	0	0	10,989	0	10,989
DIISOCYANATES	28	13	1,257	0	640,000	0	641,257	1,380	642,637
DIMETHYL PHTHALATE	229	2	0	0	0	0	0	0	0
DIMETHYLAMINE	189	4	374	5	0	0	379	676	1,055
DINITROBUTYL PHENOL	173	3	841	0	0	0	841	0	841
DINITROTOLUENE (MIXED ISOMERS)	134	4	7,473	61	0	1,100	8,634	1,280	9,914
DIOXIN AND DIOXIN-LIKE COMPOUNDS	181	58	.231	.691	.098	0	1.02	12.62	13.642
DIPHENYLAMINE	100	5	18,446	27	0	7,483	25,956	179,520	205,476
EPICHLOROHYDRIN	92	7	43,568	5	1,551	0	45,124	2,238	47,362
ETHYL ACRYLATE	139	3	6,077	13	0	0	6,090	1	6,091
ETHYLBENZENE	50	75	279,833	471	321	17,507	298,133	12,872	311,005
ETHYLENE	9	47	3,624,333	0	0	0	3,624,333	0	3,624,333
ETHYLENE GLYCOL	45	43	199,962	6,494	120,464	6,246	333,166	9,841	343,007
ETHYLENE OXIDE	88	11	54,534	65	0	0	54,599	3	54,602
FENBUTATIN OXIDE	167	1	664	0	0	571	1,235	0	1,235
FENOXYCARB	244	1	0	0	0	0	0	0	0
FLUOMETURON	253	1	0	0	0	0	0	0	0
FLUORINE	159	1	2,171	0	0	0	2,171	0	2,171
FORMALDEHYDE	4	36	366,932	26,812	1,913	7,356,799	7,752,456	20,325	7,772,781
FORMIC ACID	14	16	29,551	3,002	0	2,500,007	2,532,560	1,300	2,533,860
FREON 113	63	3	165,646	1,156	0	0	166,802	3	166,805
GLYCOL ETHERS	76	39	50,700	22,240	19	1,569	74,528	5,168	79,696
HEXACHLORO-1,3-BUTADIENE	183	4	452	0	1	0	453	52	505
HEXACHLOROBENZENE	141	10	215	69	5,322	0	5,606	71	5,677
HEXACHLOROCYCLOPENTADIENE	240	1	0	0	0	0	0	0	0
HEXACHLOROETHANE	194	3	230	0	0	0	230	0	230
HYDRAZINE	188	3	392	0	0	0	392	0	392
HYDRAZINE SULFATE	65	1	0	0	0	132,293	132,293	0	132,293
HYDROCHLORIC ACID	13	49	2,566,810	100	13	0	2,566,923	0	2,566,923

TABLE 2 (continued) – 2002 TRI RELEASES BY CHEMICALS (in Pounds)

TRI CHEMICAL	RANK	# FACILITIES	AIR	WATER	LAND	INJECTION	ON-SITE	DISPOSAL	TOTAL
HYDROGEN CYANIDE	84	8	60,129	71	0	3	60,203	0	60,203
HYDROGEN FLUORIDE	31	18	582,216	74	0	0	582,290	3	582,293
HYDROQUINONE	72	4	1,050	3,160	0	85,028	89,238	434	89,672
ISOBUTYRALDEHYDE	180	1	494	0	0	0	494	0	494
LEAD	97	47	1,464	1,341	15,948	18,452	37,205	9,622	46,827
M-XYLENE	161	1	2,015	0	0	0	2,015	309	2,324
MALEIC ANHYDRIDE	87	8	55,377	0	0	0	55,377	2,975	58,352
MANGANESE	30	35	18,431	51,700	551,667	0	621,798	30,092	651,890
MANGANESE COMPOUNDS	5	26	44,166	341,141	5,089,655	0	5,474,962	125,741	5,600,703
MERCURY	102	19	947	15	5,271	8	6,241	361	6,602
MERCURY COMPOUNDS	143	31	3,335	47	114	0	3,497	16,643	20,140
METHANOL	2	94	12,497,291	410,509	320,214	1,978,441	15,206,455	5,958	15,212,413
METHYL ACRYLATE	136	2	1,996	9	0	5,284	7,289	0	7,289
METHYL ETHYL KETONE	21	41	1,066,343	8,237	1,097	145,527	1,221,203	134	1,221,337
METHYL HYDRAZINE	199	1	94	0	0	0	94	0	94
METHYL ISOBUTYL KETONE	47	17	208,450	7	0	111,718	320,175	0	320,175
METHYL ISOTHIOCYANATE	248	1	0	0	0	0	0	0	0
METHYL METHACRYLATE	67	4	13,523	0	0	95,084	108,607	0	108,607
METHYL TERT-BUTYL ETHER	57	26	203,082	2,858	7	0	205,947	6	205,953
MOLYBDENUM TRIOXIDE	48	21	10,743	479	304,000	0	315,222	373,836	689,058
MONOCHLOROPENTAFLUOROETHANE	122	2	15,686	5	0	0	15,691	0	15,691
METHACRYLONITRILE	156	1	0	0	0	2,489	2,489	0	2,489
N,N-DIMETHYLFORMAMIDE	74	4	19,071	5,900	0	53,000	77,971	2,015	79,986
N-BUTYL ALCOHOL	54	19	218,276	179	65	0	218,520	36	218,556
N-HEXANE	6	48	4,367,912	530	254	36,896	4,405,592	12,669	4,418,261
N-METHYL-2-PYRROLIDONE	79	7	66,558	0	0	1,048	67,606	0	67,606
N-NITROSODIPHENYLAMINE	214	2	10	0	0	0	10	0	10
NAPHTHALENE	71	50	89,494	1,072	2,132	3	92,701	2,603	95,304
NICKEL	90	33	817	619	48,536	0	49,972	12,351	62,323
NICKEL COMPOUNDS	49	35	58,235	5,911	237,621	9,740	311,507	613,074	924,581
NITRATE COMPOUNDS	3	47	0	9,606,880	82,410	1,405,994	11,095,284	21,237	11,116,521
NITRIC ACID	7	19	111,351	5	6,900	4,165,430	4,283,686	7,313	4,290,999
NITRILOTRIACETIC ACID	172	2	0	1	0	880	881	0	881
NITROBENZENE	53	4	5,640	6	0	220,000	225,646	80	225,726
NITROGLYCERIN	249	1	0	0	0	0	0	0	0
O-CRESOL	235	1	0	0	0	0	0	0	0
O-TOLUIDINE	145	4	4,257	0	0	84	4,341	2	4,343
O-XYLENE	160	2	2,038	1	0	0	2,039	46	2,085
OCTACHLOROSTYRENE	230	1	0	0	0	0	0	0	0
OZONE	219	3	3	0	0	0	3	0	3
P-CRESOL	152	3	657	0	0	2,007	2,664	0	2,664
P-NITROSODIPHENYLAMINE	254	1	0	0	0	0	0	0	0
P-PHENYLENEDIAMINE	179	1	537	0	0	0	537	0	537
PENTACHLOROPHENOL	201	2	0	68	0	0	68	11,000	11,068
PERACETIC ACID	144	1	4,817	0	0	0	4,817	0	4,817
PERMETHRIN	213	1	10	0	0	0	10	0	10
PHENANTHRENE	197	4	6	93	1	0	100	478	578
PHENOL	42	34	185,650	13,277	5,259	140,010	344,196	362	344,558
PHOSGENE	165	3	1,493	0	0	0	1,493	0	1,493
PHOSPHORUS (YELLOW OR WHITE)	205	2	40	0	0	0	40	0	40
PHTHALIC ANHYDRIDE	80	7	24,023	0	41,000	0	65,023	78,200	143,223
PICRIC ACID	237	2	0	0	0	0	0	0	0
PIPERONYL BUTOXIDE	232	1	0	0	0	0	0	0	0

TABLE 2 (continued) – 2002 TRI RELEASES BY CHEMICALS (in Pounds)									
TRI CHEMICAL	RANK	# FACILITIES	AIR	WATER	LAND	INJECTION	ON-SITE	DISPOSAL	TOTAL
POLYCHLORINATED BIPHENYLS	184	5	0	0	430	0	430	1,639	2,069
POLYCYCLIC AROMATIC COMPOUNDS	106	51	17,888	2,076	1,402	0	21,366	139,621	160,987
PROFENOFOS	231	1	0	0	0	0	0	0	0
PROMETRYN	243	1	0	0	0	0	0	0	0
PROPARGYL ALCOHOL	224	1	2	0	0	0	2	0	2
PROPICONAZOLE	247	1	0	0	0	0	0	0	0
PROPIONALDEHYDE	192	2	325	2	0	0	327	0	327
PROPYLENE	17	45	1,829,901	4,731	5	0	1,834,637	0	1,834,637
PROPYLENE OXIDE	116	8	17,610	0	155	0	17,765	0	17,765
PYRIDINE	119	3	6	0	0	16,467	16,473	0	16,473
PARALDEHYDE	255	1	0	0	0	0	0	0	0
PENTACHLOROBENZENE	246	2	0	0	0	0	0	0	0
PENTACHLOROETHANE	174	5	774	0	0	0	774	2	776
QUINTOZENE	239	1	0	0	0	0	0	0	0
SEC-BUTYL ALCOHOL	58	10	195,403	1,327	0	0	196,730	1,913	198,643
SELENIUM	114	1	0	0	0	18,440	18,440	47	18,487
SELENIUM COMPOUNDS	211	2	23	0	1	0	24	8,949	8,973
SILVER	110	3	2	97	0	18,440	18,539	112	18,651
SILVER COMPOUNDS	223	1	2	0	0	0	2	7	9
SIMAZINE	162	1	1,893	73	0	0	1,966	413	2,379
SODIUM DIMETHYLDITHIOCARBAM	228	2	0	0	0	0	0	0	0
SODIUM NITRITE	16	13	4	1	0	2,100,026	2,100,031	22,000	2,122,031
STYRENE	27	38	642,763	403	7,000	0	650,166	114,289	764,455
SULFURIC ACID	12	33	2,734,475	40	644	0	2,735,159	60	2,735,219
TERT-BUTYL ALCOHOL	130	4	742	9,758	0	0	10,500	6	10,506
TETRACHLOROETHYLENE	46	22	69,655	338	119,230	140,638	329,861	775	330,636
THALLIUM	225	1	1	0	0	0	1	0	1
THALLIUM COMPOUNDS	126	1	345	250	11,000	0	11,595	0	11,595
TITANIUM TETRACHLORIDE	157	3	2,441	0	0	0	2,441	142,293	144,734
TOLUENE	15	103	2,169,476	859	565	161,859	2,332,759	54,283	2,387,042
TOLUENE-2,4-DIISOCYANATE	216	2	7	0	0	0	7	0	7
TOLUENEDIISOCYANATE (MIXED	117	5	392	0	17,000	0	17,392	5,201	22,593
TRANS-1,3-DICHLOROPROPENE	222	1	2	0	0	0	2	0	2
TRICHLOROETHYLENE	60	13	45,683	0	0	140,190	185,873	161	186,034
TRICHLOROFLUOROMETHANE (CFC)	98	3	32,900	37	0	0	32,937	0	32,937
TRIETHYLAMINE	99	6	2,609	429	0	23,100	26,138	0	26,138
VANADIUM (FUME OR DUST)	202	2	65	0	0	0	65	1	66
VANADIUM COMPOUNDS	34	22	188,014	66,511	236,872	0	491,397	142,389	633,786
VINYL ACETATE	36	8	437,837	65	8,400	0	446,302	3	446,305
VINYL CHLORIDE	55	12	77,481	192	0	139,450	217,123	42	217,165
VINYLIDENE CHLORIDE	123	6	15,381	0	0	0	15,381	12	15,393
XYLENE (MIXED ISOMERS)	20	91	1,269,196	536	3,184	191	1,273,106	78,278	1,351,384
ZINC (FUME OR DUST)	125	13	12,382	0	0	0	12,382	54,683	67,065
ZINC COMPOUNDS	10	78	149,131	67,278	3,025,316	706	3,242,431	2,373,817	5,616,248

TABLE 3 - Special Interest Chemicals (Formerly Section 2.11)				
1988	1,2-Dichloride	Ammonia	Benzene	Chloroform
1989	Ethylene oxide	Toluene		Vinyl chloride
1990	Acetonitrile	Carbon tetrachloride		Lead/lead compounds
1991	Hexachlorobenzene	Hexachlorobutadiene		Mercury/mercury cmpds
1992	Acetonitrile	Acrylamide	Arsenic	Formaldehyde
1993	1,2-Dichloroethane	Chlorine	Hydrogen Sulfide	Xylenes (mixed isomers)
1994	Tetrachloroethylene	1,3-Butadiene	Acetaldehyde	1,1,2,2-tetrachloroethane
1995	Carbon disulfide	Acrylic Acid	Ethylene	
1997	Acrylonitrile	Hexachlorobenzene	1,2-Dichloroethane	Mercury/mercury cmpds
1998	Lead/lead compounds		PCB's	
1999	Mercury/mercury compounds		Dioxin and dioxin like compounds	
2000	(No chemicals featured)			
2001	Ammonia		Methanol	
Chemicals in the News				
2002	Mercury/Mercury Compounds			

Table 3—Special Interest Chemicals. Special interest chemicals featured in Section 2.11 of previous LEI publications are listed above. "Chemicals in the News" (Chapter 5) provides more detailed chemical information and will replace this section.

TABLE 4 - PBT CHEMICAL RELEASES (in Pounds)		
CHEMICAL	CAS #	TOTAL
ALDRIN	309-00-2	*
BENZO(g,h,i)PERYLENE	191-24-2	999
CHLORDANE	57-74-9	*
DIOXIN AND DIOXIN-LIKE COMPOUNDS	N150	1.24
HEPTACHLOR	76-44-8	*
HEXACHLOROBENZENE	118-74-1	5,606
ISODRIN	465-73-6	*
LEAD	7439-92-1	18,963
LEAD COMPOUNDS	N420	976,485
MERCURY	7439-97-6	6,241
MERCURY COMPOUNDS	N458	3,497
METHOXYCHLOR	72-43-5	*
OCTACHLOROSTYRENE	29082-74-4	0
PENDIMETHALIN	40487-42-1	*
PENTACHLOROBENZENE	608-93-5	0
POLYCHLORINATED BIPHENYLS	1336-36-3	430
POLYCYCLIC AROMATIC COMPOUNDS (PACs)	N590	21,366
TOXAPHENE	8001-35-2	*
TRIFLURALIN	1582-09-8	*

*No TRI reports submitted for these chemicals.

TABLE 5 - TEDI PARISH TOTAL FOR ALL YEARS (in Pounds)

Parish	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Acadia	90,154	9,824	81,214	4,261	2,470	0	0	0	0	0	0	0
Allen	78,286	77,264	77,264	77,264	77,354	77,016	76,855	41,105	39,964	46,492	50,364	42,073
Ascension	33,088,038	32,396,482	32,832,674	29,077,881	27,604,944	28,517,218	31,220,158	26,614,216	22,939,271	16,456,011	12,157,765	13,850,658
Assumption	530,165	326,702	512,636	394,447	356,512	336,925	261,101	182,090	122,789	85,200	134,297	70,626
Beauregard	1,957,554	2,150,796	1,786,941	2,152,225	2,268,837	2,099,277	2,062,088	4,067,822	2,141,095	2,044,414	2,047,054	1,969,947
Bienville	315,900	191,983	67,860	1,794	1,788	1,798	1,796	1,798	876	586	830	576
Bossier	*	*	*	*	*	*	*	*	1,081	1,084	1,258	18,086
Caddo	2,354,463	2,163,699	1,449,795	1,525,325	1,266,420	1,765,001	1,372,086	1,214,292	798,225	1,061,190	1,147,788	1,089,676
Calcasieu	17,105,279	10,226,683	6,823,987	5,967,500	5,796,277	5,042,617	5,093,725	4,874,939	4,232,095	4,135,615	3,714,106	3,946,187
Cameron	752,067	404,944	408,161	321,139	215,910	218,163	105,204	68,942	90,460	158,998	81,924	13,908
De Soto	534,947	574,548	716,845	2,349,079	3,421,323	4,529,665	4,905,206	4,831,725	4,650,187	4,072,531	4,081,211	4,061,846
East Baton Rouge	8,930,902	9,197,906	8,011,633	7,445,550	6,329,032	6,115,466	6,443,126	6,401,755	5,535,518	5,632,229	4,722,618	4,220,143
Evangeline	2,757,512	6,141,011	7,283,169	8,990,775	7,211,156	6,778,200	370,956	282,685	284,989	256,352	236,976	211,657
Franklin	157,342	173,277	195,179	183,231	193,950	86,898	27,867	*	*	*	*	*
Grant	604,546	731,454	1,120,456	890,616	769,508	836,250	1,531,990	1,296,480	816,625	564,207	307,293	3,060
Iberia	356,012	273,416	87,038	74,425	53,390	94,242	101,546	97,373	52,542	85,966	165,323	56,886
Iberville	3,361,819	2,919,702	2,275,099	2,779,762	2,096,592	1,735,102	1,484,396	1,788,368	1,496,841	1,525,038	1,623,400	1,608,686
Jackson	930,189	869,132	792,150	1,565,377	1,673,152	1,579,797	1,946,203	1,984,355	237,300	1,857,925	1,311,215	1,303,256
Jefferson	2,773,437	1,458,295	1,348,192	1,587,927	1,431,373	1,006,718	883,196	734,531	585,829	779,212	867,682	722,544
Jefferson Davis	73,447	60,317	55,911	29,643	8,774	8,967	8,798	8,099	0	0	1,296	1,298
Lafayette	89,126	84,123	26,686	7,180	4,020	2,060	2,880	5,900	1,844	*	*	*
Lafourche	643,913	594,775	513,545	474,519	797,423	127,052	109,331	156,269	107,935	84,149	75,286	87,954
La Salle	46,040	67,422	203,012	91,690	86,065	91,084	50,558	51,722	60,890	101,177	92,960	61,974
Lincoln	271,569	273,054	262,448	394,950	173,621	109,825	118,482	122,625	112,579	114,296	106,744	82,389
Livingston	*	26,160	17,560	21,859	7,644	7,512	7,700	30,977	36,979	44,588	48,358	110,558
Morehouse	1,993,020	1,780,456	1,529,411	1,699,624	1,564,848	1,526,777	1,457,839	1,368,678	1,996,587	2,116,063	1,950,781	1,999,111
Natchitoches	1,230,039	877,553	1,050,743	1,282,386	1,403,394	1,295,691	1,488,533	1,386,715	1,599,150	1,276,092	999,403	976,230
Orleans	1,051,538	463,907	410,803	369,677	231,939	253,867	232,863	221,096	201,169	186,952	196,692	212,998
Ouachita	3,559,188	2,746,932	2,206,236	3,272,596	3,603,423	3,307,114	3,075,214	3,034,471	1,732,482	1,987,917	1,802,915	1,898,833
Plaquemines	4,320,032	3,880,335	2,787,304	1,586,625	922,070	461,667	366,673	319,022	260,148	695,154	488,754	481,123
Pointe Coupee	100,148	82,129	62,760	60,208	25,514	242,972	284,624	342,680	371,198	315,337	168,634	98,153
Rapides	1,129,793	1,453,699	1,581,065	2,928,524	1,771,036	2,854,080	1,382,369	1,417,893	1,448,660	1,288,292	1,198,362	1,213,179
Richland	51,863	23,571	16,350	17,505	6,497	7,338	7,327	3,905	4,526	4,318	3,206	1,392
St. Bernard	1,094,659	762,421	774,015	850,821	790,211	660,629	610,691	667,943	602,372	742,767	860,136	1,365,311
St. Charles	4,765,464	4,154,977	3,364,650	3,126,466	2,276,778	2,428,177	2,188,002	2,800,397	1,908,216	1,951,123	2,241,571	2,072,016
St. James	15,284,010	7,527,193	5,799,168	6,546,732	8,595,999	7,616,809	7,767,731	7,187,238	6,572,573	2,920,735	1,276,559	2,427,572
St. John the Baptist	1,304,489	1,292,188	776,014	862,540	776,130	778,478	647,879	637,896	676,578	696,537	617,241	629,413
St. Landry	1,601,665	541,780	663,697	169,722	651,715	170,814	77,194	334,211	116,215	93,138	92,912	272,600
St. Martin	240,760	171,140	78,558	114,559	10,754	64,701	20,926	9,996	50,739	48,204	54,058	51,085
St. Mary	19,485,119	18,366,442	19,804,145	19,448,383	17,135,689	16,350,581	4,714,799	827,446	627,326	616,076	534,365	465,502
St. Tammany	60,975	101,848	92,802	42,453	28,735	13,799	21,697	18,500	26,655	12,236	1,087	36,444
Sabine	30,924	154,302	98,782	113,280	107,130	114,096	85,300	131,869	190,556	183,760	163,350	149,930
Tangipahoa	66,799	64,945	87,594	89,563	128,208	137,280	149,653	113,514	103,153	147,850	155,965	143,757
Tensas	40,453	236,383	236,382	67,145	116,615	189	95	92	53	44	37	35
Terrebonne	713,826	511,831	435,072	350,932	520,554	283,063	111,957	85,093	79,623	45,446	72,693	39,275
Union	320,930	282,740	66,180	77,225	70,518	74,272	114,003	86,034	90,880	80,511	81,082	101,003
Vermilion	1,551,817	779,498	629,879	467,220	255,019	111,004	220,692	95,429	41,784	14,825	14,477	4,041
Vernon	22,091	22,091	22,091	22,091	22,091	17,026	21,775	14,056	15,306	13,479	16,125	15,842
Washington	1,843,495	1,528,989	1,353,223	2,454,233	2,297,635	2,324,432	2,340,646	2,307,242	2,374,877	2,318,260	2,168,363	2,051,379
Webster	1,162,544	374,241	300,801	304,329	392,369	377,627	372,278	266,756	163,914	121,579	103,281	187,023
West Baton Rouge	551,635	594,191	1,105,753	1,269,764	1,492,343	1,042,502	1,491,252	1,501,464	1,168,937	923,615	898,906	2,107,099
West Feliciana	494,600	549,640	356,439	599,567	828,861	770,060	800,995	846,140	847,389	813,861	646,267	670,292
Winn	495,989	482,461	238,550	239,934	185,899	58,977	31,408	44,420	37,239	38,341	31,441	71,106

*No TRI reports submitted

TABLE 6 - TEDI AIR POLLUTANTS BY CLASS	
TEDI Class I	**CAS #**
1,2-Dibromoethane	106-93-4
Acrylonitrile	107-31-1
Arsenic & Compounds	7440-38-2
Asbestos (friable)	1332-21-4
Benzene	71-43-2
Beryllium & Compounds	7440-41-7
Bis (2-chloroethyl) Ether	111-44-4
Cadmium & Compounds	7440-43-9
Chromium VI & Compounds	7440-47-3
Epichlorohydrin	106-89-8
Ethylene Oxide	75-21-8
Formaldehyde	20-00-00
Nickel & Compounds	7440-02-0
Propylene Oxide	75-56-9
Vinyl Chloride	75-01-4

TEDI Class II	CAS #
1,1,2-Trichloroethane	79-00-5
1,2-Dichloroethane	107-06-2
1,2-Dichloropropane	78-87-5
1,3-Butadiene	106-89-8
1,3-Dichloropropylene	542-75-6
1,4-Dichlorobenzene	106-46-7
1,4-Dioxane	123-91-1
2,4-Dinitrotoluene	121-14-2
2,6-Dinitrotoluene	606-20-2
2-Nitropropane	76-46-9
Acetaldehyde	75-07-0
Acetonitrile	75-05-8
Acrolein	107-02-8
Acrylamide	79-06-1
Allyl Chloride	107-05-1
Aniline	62-53-3
Antimony & Compounds	7440-36-0
Barium & Compounds	7440-39-3
Biphenyl	92-52-4
Carbon Disulfide	75-15-0
Carbon Tetrachloride	56-23-5
Chlorinated Dibenzo Furans	51207-31-9
Chlorinated Dibenzo-p-Dioxins	3268-87-9
Chlorine Dioxide	10049-04-4
Chlorobenzene	108-90-7
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
Chloroprene	126-99-8
Copper & Compounds	7440-50-8
Diaminotoluene	25376-45-8
Dibutyl Phthalate	84-74-2

TABLE 6 (continued) - TEDI AIR POLLUTANTS BY CLASS	
TEDI Class II (continued)	**CAS #**
Dichloromethane	75-09-2
Ethyl Acrylate	140-88-5
Ethyl Benzene	100-41-4
Glycol Ethers	09-86-4
Hexachloro-1,3-Butadiene	87-68-3
Hexachlorobenzene	118-74-1
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Manganese & Compounds	7439-96-5
Mercury & Compounds	7439-97-6
Naphthalene & Methylnaphthalenes	91-20-3
Nitrobenzene	98-95-3
Phenol	108-95-2
Polynuclear Aromatic Hydrocarbons	206-44-0
Selenium & Compounds	7782-49-2
Styrene	100-42-5
Tetrachloroethane	79-34-5
Tetrachloroethylene	127-18-4
Toluene-2,4-Diisocyanate	584-84-9
Toluene-2,6-Diisocyanate	91-08-7
Trichloroethylene	79-01-6
Vinylidene Chloride	75-35-4
Xylene	1330-20-7

TEDI Class III	CAS #
1,1,1-Trichloroethane	71-55-6
Acrylic Acid	79-10-7
Ammonia	7664-41-7
Carbonyl Sulfide	463-58-1
Chlorine	7782-50-5
Cresol	1319-77-3
Cumene	98-82-8
Ethylene Glycol	107-21-1
Hydrochloric Acid	7647-01-0
Hydrogen Cyanide	74-90-8
Hydrogen Fluoride	7664-39-3
Hydrogen Sulfide	7783-06-4
Maleic Anhydride	108-31-6
Methanol	67-56-1
Methyl Ethyl Ketone	78-93-3
Methyl Isobutyl Ketone	108-10-1
Methyl Metharcylate	80-62-6
N-Butyl Alcohol	71-36-3
N-Hexane	110-54-3
Nitric Acid	7697-37-2
Phosgene	75-44-5
Phthalic Anhydride	85-44-9
Propionaldehyde	123-38-6
Pyridine	110-86-1
Sulfuric Acid	7664-93-9
Toluene	108-88-3
Vinyl Acetate	108-05-4
Zinc & Compounds	7440-66-6

GLOSSARY OF TERMS

Abatement — the reduction in degree, intensity, or elimination of pollution.
Acute Effect — occurring over a short period of time; used to describe brief exposures and effects, which appear promptly after exposure.
Air Quality Index — (formerly known as the Pollutant Standards Index) a color-coded system used to report the levels of ozone and other common air pollutants. The AQI was developed by the EPA to make it easier for the public to understand the health significance of air pollution levels. The higher the AQI value, the higher the danger.
Air Toxics — see Toxic Air Pollutants (TAPs).
Airshed — a term denoting a geographical area, the whole of which, because of topography, meteorology, and climate, shares the same air.
Alternative Fuels — See Clean Fuels.
Ambient Air — outdoor air; any portion of the atmosphere not confined by walls and a roof.
Anthropogenic Sources of Air Pollution -- sources of air pollution that are man-made, or the result of human activity; such as, industrial sources or exhaust from vehicles.
Area Source – any stationary source that is not a major source.
ASCII - the American Standard Code for Information Interchange is a code that allows computers to handle all printable characters. In ASCII, characters of the alphabet "A-Z", integers "0-9", and special characters "!@#$%^&*(" are all represented by a code number from 0-128. For example, the ASCII code for the uppercase letter (A) is 65
Atmosphere — the layer of life-giving gases (air) that surrounds the earth.
Attainment — a designation used when an area meets an air quality standard.
Banking — provision in permit regulations whereby a facility can take credit for reducing emissions beyond regulatory limits and use that credit at a later date.
Biogenic Sources of Air Pollution — natural phenomena that emit air pollutants; for example, volatile organic compounds emitted from trees and other vegetation, or pollutants produced by volcanic eruptions or lightning-induced forest fires.
Boiler – a "boiler" is defined as a burner, firebox, or heat exchanger, and a means of creating and directing a flow of gases through the unit.
Bioaccumulation – term used to describe the process by which organisms may accumulate chemical substances in their bodies. The term refers to uptake of chemicals from water (bioconcentration) and from ingested food and sediment residues.
Carbon Monoxide (CO) — an odorless, tasteless, colorless gas that is emitted primarily from any form of combustion. CO is one of the six criteria pollutants for which EPA has established a National Ambient Air Quality Standard.
Carcinogen — any substance that can cause or contribute to the development of cancer.
Certification Statement – a document submitted to the Louisiana Department of Environmental Quality by facilities each year. In a Certification Statement, facility management certifies the validity of the data in the Emissions Inventory System (EIS) Submittal Files.
Chronic Effect — an adverse effect of long duration on a human or animal in which symptoms recur frequently or develop slowly over a long period of time.
Clean Air Act (CAA) — long-standing federal legislation that is the legal basis for the national clean air programs, last amended in 1990.
Clean Fuels — low-pollution fuels that can replace ordinary gasoline. Examples are compressed natural gas (CNG), methanol, ethanol, liquefied petroleum gas (LPG), and others. Also referred to as alternative fuels.
COBOL – "Common Business Oriented Language" is a programming language used in some computer systems that handle large databases. The EIS is a series of computer programs written in the COBOL language.
Coding Forms – paper forms that graphically present the EIS Cards and fields. Facilities may use coding forms as an aid in entering their EIS data into computer Submittal Files. Only facilities with fewer than five NEDS Points may submit their EIS data to the EED on coding form instead of computer Submittal Files.

Combustion — burning, that is the production of heat and light energy through chemical change, usually oxidation of hydrocarbon fuel.

Continuous Emission Monitor (CEM) — a type of air emission monitoring device installed to operate continuously inside of smoke stacks.

Control Technologies/Control Measures equipment, processes, or activities used to reduce air pollution.

Emission — the release of pollutants into the outdoor atmosphere.

Emission Factors – published estimates based on the average measured emissions at several facilities in the same industry for the same general type of industrial process. Emission factors usually express releases as a ratio of amount released to process/equipment output.

Emissions Inventory — a list of air pollutants emitted into a community's atmosphere, usually a tabulation of data detailing the types, amounts, quantities, and sources of the emissions.

Emission Point – a single point is assigned a NEDS Identifier in EIS. An emission point can represent one or more physical pieces of equipment at a facility.

Emission Standard — the maximum amount of pollutant that is by regulation permitted to be discharged from a polluting source - for example, the number of pounds of dust that may be emitted per hour from an industrial process.

Enforcement — the legal methods used to make polluters obey the Clean Air Act.

Engineering Judgment – opinion based on evaluation of all pertinent data as would be determined by a properly trained engineer.

EPA — the U.S. Environmental Protection Agency the federal agency responsible for control of air and water pollution, toxic substances, solid and hazardous waste, and cleanup of contaminated sites.

EPCRA – Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986).

Exceedance — a violation of environmental protection standards by exceeding allowable limits or concentration levels; such as an exceedance of the National Ambient Air Standard for ozone.

Existing Source – any stationary source that is not a new source.

Exposure—the act or an instance in which a chemical comes in contact with an organism by crossing biological barriers, and entering the body.

Fugitive Emissions — air emissions not caught by a capture or control system; for example, equipment leaks from valves, pumps, and compressors.

Glycol Dehydrators — dehydration equipment used by the natural gas processing industry to remove water vapor from natural gas. This equipment absorbs the water vapor using ethylene glycol or triethylene glycol; and then heats the glycol to drive off the water vapor in the form of steam. Glycol also absorbs significant amounts of volatile organic compounds (VOCs), which escape to the atmosphere when the steam is released. Pollution control devices, which capture and destroy these VOCs, are now required on glycol dehydrators that process more than five million cubic feet per day.

Incineration — the burning of household or industrial waste in a combustion chamber designed for the purpose.

Inspection/Maintenance Program — see Vehicle Inspection & Maintenance Program

Lead (Pb) — a heavy metal that is hazardous to health if breathed or swallowed. It is one of the six criteria pollutants for which EPA has established a National Ambient Air Quality Standard.

Louisiana Administrative Code (LAC) the code or set of government regulations for the state of Louisiana. Louisiana environmental regulations (those promulgated by the Louisiana Department of Environmental Quality) are found in Title 33 of the LAC. Air quality regulations are found in Part III of Title 33 of the LAC.

Louisiana Environmental Quality Act Subtitle II of Title 30 of the Louisiana Revised Statutes.

Louisiana Revised Statutes (LRS) — Acts of the Louisiana Legislature, which are encoded into the statutory code, or set of laws for the state of Louisiana. Most Louisiana environmental laws are found in LRS Title 30, Subtitle II - Environmental Quality.

Major Source – any stationary source of air pollutants that emits, or has the potential to emit 10 tons per year or more or 25 tons per year or more of any combination of toxic air pollutants listed in LAC 33:III.Chapter 51, Table 51.1.

Manufacture – to make or process (a raw material) into a finished product, especially by a large-scale industrial operation.

Ozone (O_3) — a colorless gas, ozone is the major component of urban smog. It is produced by the chemical reaction of nitrogen dioxide and volatile organic compounds in the presence of sunlight. Ozone is one of the six criteria pollutants for which EPA has established a National Ambient Air Quality Standard. Although harmful to humans and the environment at ground level, ozone serves a useful purpose in the earth's outer atmosphere (or stratosphere), where a layer of ozone shields us from the sun's radiation.
Ozone Exceedance — see exceedance
Ozone Season – the five-month period when ozone formation is at its peak in a locale. In the five-parish Baton Rouge Nonattainment Area and Calcasieu Parish, the Ozone Season is May-September.
Particulate Matter (PM) — fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air emissions. Particulate matter, in the form of PM10 (particles less than 10 microns in size) is one of the six criteria pollutants for which EPA has established a National Ambient Air Quality Standard.
Parts Per Billion (ppb) — a concentration measurement; the number of parts of a given pollutant in a billion parts.
Parts Per Million (ppm) — a concentration measurement; the number of parts of a given pollutant in a million parts.
Permit — a document that resembles a license, required by the Clean Air Act for major sources of air pollution, such as power plants, chemical factories, and in some cases, smaller polluters. As Louisiana has a federally approved air permit program, permits are issued by the state environmental agency (i.e., the Louisiana DEQ).
Persistence -- refers to the length of time the chemical can exist in the environment before being destroyed (i.e., transformed) by natural processes.
PM, PM10 — see Particulate Matter.
Pollutant Standards Index (PSI) — a system developed by the federal government for reporting ambient air quality to the public. By this system, air pollutant concentrations are translated into numerical values related to human health conditions. This system has been replaced by the Air Quality Index.
Pollutant Code – is the SAROAD Pollutant Code of the pollutant being reported.
Portable Source – an emission source that moves or may be transported from one place to another.
Potential to Emit – the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.
Precursors — compounds that change chemically or physically after being emitted into the air and eventually produce air pollutants. For example, volatile organic compounds and nitrogen dioxide are precursors for ozone.
Process – the preparation of a chemical for manufacture and distribution in commerce: (1) in the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance, or (2) as part of an article containing the toxic chemical. Process also applies to the processing of a toxic chemical contained in a mixture or trade name product.
Production Index – as applied to TRI reporting of waste minimization, a ratio of reporting-year production to the prior reporting-year production. The index is calculated to most closely reflect activities involving the chemical being reported on the Form R.
PSD – Prevention of Significant Deterioration.
PSD Permit – a type of permit issued to a facility after a PSD permit review, the most stringent type of permit review. A PSD review is necessary and all possible controls have been applied. See LAC 33:III.509.
Publicly Owned Treatment Works (POTWs) – a wastewater treatment works that is owned by a state or municipality including any devices used in the storage, treatment, recycling, and reclamation of domestic sewerage or a combination of domestic sewerage and industrial wastewaters. It also includes sewers, pipes, and other conveyances that carry wastewater to such a treatment works. The term also refers to the authority that has jurisdiction over discharges to and from such a treatment works.
Quality Assurance/Quality Control – the ability to prove to clients that the systems used to generate data are under control and that they fully incorporate the necessary quality control measures.
Regulated Louisiana Toxic Air Pollutants – pollutants listed in Table 51.1 of LAC 33:III.Chapter 51, also known as TEDI pollutants and TAPs.

Release – pursuant to the EPCRA Section 329(8), releases include any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

Risk Assessment -- a methodological approach in which the toxicities of a chemical are identified, characterized, and analyzed for dose-response relationships, and a mathematical model is applied to the data to generate a numerical estimate that can serve as a guide to allowable exposures.

SARA – Superfund Amendment and Reauthorization Act of 1986.

SAROAD – the "Storage And Retrieval Of Aerometric Data" system is a coding system developed be EPA in the 1970's for distinguishing between different chemicals.

SAROAD Pollutant Code – a five-digit code assigned to a pollutant. The first digit determines the "major class" of the pollutant; the second digit determines the "sub-class" of the pollutant; the third digit determines the "family" of the pollutant; the fourth and fifth digits describe up to 99 pollutants under each family.

SIP — see State Implementation Plan.

Smog — used to describe many air pollution problems, particularly in urban areas. This term is a contraction of smoke and fog. It refers to the irritating stagnant haze resulting from the formation of ground-level ozone, which is often mixed with other air pollutants such as particulates.

SOCMI – see Synthetic Organic Chemical Manufacturing Industry.

Source Classification Code – a coding scheme created to describe a unique process within a source category. SCCs are used in Emissions Inventory to associate pollutant emissions to specific processes.

Source Code – identifies the process category for the SCC.

Source Description – a brief description of the source; for example, "Oil-fired Boiler" or "Lime kiln production".

Source Reduction – industrial source reduction is defined in the Pollution Prevention Act of 1990 as "any practice which (1) reduces the amount of any hazardous substance, pollutant, or contaminant entering any wastestream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (2) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control."

Standard Industrial Classification (SIC) - codes define industries in accordance with the composition and structure of the economy and cover the entire field of economic activities.

State Implementation Plan (SIP) — U.S. EPA-approved state plan for the establishment, regulation, and enforcement of air pollution standards.

Stationary Source — a fixed, non-mobile producer of pollution, usually at industrial or commercial facilities.

Standard Industrial Classification (SIC) Code – a number developed by the US Office of Management and Budget to identify industrial sectors. The first two digits identify the broad industrial sector (i.e., SIC code 20, Food and Kindred Products) and the last two digits represent a facility's specialty within this broad sector (i.e., SIC code 2047, Dog and Cat Food).

Stack Emissions – point source emissions that occur through confined air streams, such as stacks, vents, ducts, or pipes.

Sulfur Dioxide (SO_2) — a pungent, colorless gas formed primarily by the combustion of fossil fuels. SO2 is one of the six criteria pollutants for which EPA has established a National Ambient Air Quality Standard.

Synthetic Organic Chemical Manufacturing Industry (SOCMI) – the industry that produces, as intermediates or final products, one or more of the chemicals listed in Table 8 of LAC 33.III.Chapter 21.

Toxic Air Pollutants (TAPs) — pollutants that are regulated under the Louisiana Administrative Code Title 33, Part III, Chapter 51. The state list of toxic air pollutants encompasses the federal list of HAPs, and includes additional pollutants not on the federal list. See also Hazardous Air Pollutants (HAPs).

Toxic Emissions Data Inventory (TEDI) — an inventory of all toxic air pollutants (TAPs) released by major toxics sources regulated under the Louisiana Comprehensive Toxic Air Pollutant Emission Control Program (LAC 33:III.Chapter 51).

Toxic Release Inventory (TRI) — a database of toxic releases by industrial facilities to air, water, land, and underground injection in the U.S. It is compiled from TRI reports, which are mandated under federal law.

Toxicity – a relative term generally used in comparing the harmful effect of one chemical on some biologic mechanism with the effect of another chemical.

Upsets — sudden or unforeseeable emissions event that is beyond the control of the owner or operator of an industrial facility. An upset is usually the result of equipment failure, accident, or emergency shutdown.

UTM (Universal Transverse Mercator) – a standard system of cartographic coordinates that is the latitude/longitude system for the purposes of atmospheric modeling, GIS, etc.

UTM Horizontal (Easting) Coordinate – analogous to longitude.

UTM Vertical (Northing) Coordinate – analogous to latitude.

Vehicle Inspection & Maintenance Program (I/M Program) — auto inspection programs are required for some polluted areas. These periodic inspections are required to check whether cars have emission control systems that are working properly.

Volatile Organic Compound (VOC) — an organic compound which evaporates readily at atmospheric temperatures, and which participates in atmospheric photochemical reactions.

ENVIRONMENTAL ACRONYMS

*NOTE: The following Acronyms are described as utilized in the environmental community. They may have one or more different meanings other than the cited text references.

ACGIH	American Conference of Governmental Industrial Hygienists
ACM	Asbestos-Containing Materials
ANSI	American National Standards Institute, Inc.
API	American Petroleum Institute
AST	Above Ground Storage Tank
ASTM	American Society for Testing & Methods
ATSDR	Agency for Toxic Substances & Disease Registry
BACT	Best Available Control Technology
BDAT	Best Demonstrated Available Technology
BIF	Boiler and Industrial Furnace
BMP	Best Management Practice
BOD	Biological Oxygen Demand
CAA	Clean Air Act
CAER	Community Awareness & Emergency Response
CAMU	Corrective Action Management Unit
CAS	Chemical Abstract Service
CDC	Center for Disease Control
CEM	Continuous Emissions Monitoring
CERR	Consolidated Emissions Reporting Rule
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CMS	Corrective Measures Study
COD	Chemical Oxygen Demand
CWA	Clean Water Act
DEQ	Dept. of Environmental Quality
DMR	Discharge Monitoring Report
DNR	Dept. of Natural Resources
DOC	Dissolved Organic Carbon
DRE	Destruction & Removal Efficiency
EHS	Extremely Hazardous Substance
EIS	Emissions Inventory System
EIS	Environmental Impact Statement
ELP	Environmental Leadership Program
EPA	Environmental Protection Agency
EPCRA	Emergency Planning & Community Right-to-Know Act
ERC	Emergency Response Commission
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment

FIFRA	Federal Insecticide, Fungicide & Rodenticide Act
FINDS	Facility Index System
FOIA	Freedom of Information Act
FR	Federal Register
HAP	Hazardous Air Pollutant
HCFC	Halogenated Chorofluorocarbon
HMR	Hazardous Materials Regulations
HON	Hazardous Organic NESHAP
HSP	Health & Safety Plan
HSWA	Hazardous & Solid Waste Amendments - 1984 Amendments to RCRA
IDLH	Immediately Dangerous to Life or Health
I/M	Inspection & Maintenance
LDR	Land Disposal Restrictions
LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Commission
LUST	Leaking Underground Storage Tank
MACT	Maximum Achievable Control Technology
MCL	Maximum Containment Level
MTR	Minimum Technology Requirements
NA	Nonattainment Area
NAAQS	National Ambient Air Quality Standard
NACEPT	National Advisory Committee on Environmental Policy and Technology
NESHAP	National Emission Standard for Hazardous Air Pollutant
NIOSH	National Institute for Occupational Safety & Health
NOAA	National Oceanic & Atmospheric Administration
NOEC	No observed effect concentration
NORM	Naturally Occurring Radioactive Materials
NOx	Abbreviation for oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	Nuclear Regulatory Commission
NSPS	New Source Performance Standard
OSHA	Occupational Safety & Health Administration
PAH	Polynuclear Aromatic Hydrocarbon
PBT	Persistent Bioaccumulative and Toxic
PCB	Polychlorinated Biphenyls
PEL	Permissible Exposure Limit
PIC	Product of Incomplete Combustion
PIES	Pollution Prevention Information Exchange
PM	Particulate Matter
POTW	Publicly Owned Treatment Works
PPA	Pollution Prevention Act of 1990
ppb	parts per billion
PPE	Personal Protective Equipment

ppm	parts per million
PRP	Potentially Responsible Party
RCRA	Resource Conservation & Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RQ	Reportable Quantity
SARA	Superfund Amendments & Reauthorization Act
SDWA	Safe Drinking Water Act
SERC	State Emergency Response Commission
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SOx	Sulfur Oxides
SOCMA	Synthetic Organic Chemical Manufacturers Association
SOP	Standard Operating Procedures
SPCC	Spill Prevention Control & Countermeasures
SQG	Small Quantity Generator
STEL	Short Term Exposure Limit
SWMU	Solid Waste Management Unit (RCRA)
TAPs	Toxic Air Pollutants
TC	Toxicity Characteristics
TCLP	Toxicity Characteristic Leaching Procedure (RCRA)
THC	Total Hydrocarbons
TITLE III	Emergency Planning and Community Right-to-Know Act
TLV	Threshold Limit Value
TOXNET	Toxicology Network
TPH	Total Petroleum Hydrocarbons
TPQ	Total Planning Quantity
TRI	Toxic Release Inventory
TSCA	Toxic Substance Control Act
TSDF	Treatment, Storage and Disposal Facility
TSP	Total Suspended Particulates
TSS	Total Suspended Solids
TUR	Toxic Use Reduction
TWA	Time Weighted Average
UIC	Underground Injection Control
USC	United States Code
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquid
WQM	Water Quality Management
WQS	Water Quality Standards

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SOURCES OF ASSOCIATED INFORMATION

The data contained in this report and additional information to assist in interpreting its contents, are available to the public in a variety of places:

1. **TRI Data** can be accessed on-line at http://www.deq.state.la.us/evaluation/TRI/index.htm.

2. **TEDI Data** can be accessed on-line at http://www.deq.state.la.us/evaluation/airmon/tedi.htm.

3. **Emissions Inventory Data** can be accessed on-line at http://www.deq.state.la.us/evaluation/eis/index.htm.

4. The **Toxics Release Inventory** forms submitted by individual facilities within the state of Louisiana are on file at the Office of Environmental Assessment, Evaluation Division of the Louisiana Department of Environmental Quality. Chemical information and inquiries should be directed to this section in writing or by phone:

   Attn: Delecia LaFrance (delecia.lafrance@la.gov)
   Office of Environmental Assessment
   P.O. Box 4314
   Baton Rouge, LA 70821-4314
   (225) 219-3502

5. The **Emissions Inventory** forms submitted by individual facilities within the state of Louisiana are on file at the Office of Environmental Assessment, Evaluation Division of the Louisiana Department of Environmental Quality. Chemical information and inquiries should be directed to this section in writing or by phone:

   Attn: Elizabeth McDearman Byers (elizabeth.byers@la.gov)
   Office of Environmental Assessment
   P.O. Box 4314
   Baton Rouge, LA 70821-4314
   (225) 219-3500

6. The **Toxic Emissions Data Inventory** forms submitted by individual facilities within the state of Louisiana are on file at the Office of Environmental Assessment, Evaluation Division of the Louisiana Department of Environmental Quality. Chemical information and inquiries should be directed to this section in writing or by phone:

   Attn: Shelita Williams (shelita.williams@la.gov)
   Office of Environmental Assessment
   P.O. Box 4314
   Baton Rouge, LA 70821-4314
   (225) 219-3503

7. Your **Local Emergency Planning Committee (LEPC)** should have information about the types of chemicals located on-site at facilities in your area. Another source of this type of information is your local fire department or your local Emergency Preparedness Office. Their phone numbers can be found in your local phone book or by calling your local library.

8. The **Office of State Police** in Baton Rouge also has information concerning the types of chemicals that facilities have on-site. Phone: (225) 925-6113. http://www.dps.state.la.us/lsp/tess.html

9. The **United States EPA Toxic Release Inventory** Homepage: http://www.epa.gov/tri

10. **State Designated Toxic Release Inventory (TRI) Contacts**: http://www.epa.gov/tri/programs/state_programs.htm#directory

11. US EPA Office of Environmental Information-**TRI Explorer**: http://www.epa.gov/tri/triexplorer

12. EPA's **TTNWEB Chief** Homepage: http://www.epa.gov/ttn/chief/

13. EPA **Environmental indicators** Homepage: www.epa.gov/opptintr/env_ind/

14. EPA **Integrated Risk Information System**: www.epa.gov/iris

15. Browse **TRI topics** on US EPA Homepage: www.epa.gov/tri/topics.htm

16. EPA **Envirofacts** Warehouse: www.epa.gov/enviro/index_java.html

17. The National Library of Medicine (NLM)'s Toxicology Data Network, commonly referred to as **TOXNET**, is a computerized collection of toxicology-orientated databases. It also contains the Toxic Release Inventory information on every facility in the nation that has filed Form R's. The system allows access to valuable data on hazardous chemicals, as well as the TRI information. Many Universities have the ability to search the NLM system. Check with those in your area. http://www.nlm.nih.gov/

18. Agency for Toxic Substances and Disease Registry (**ATSDR**): http://www.atsdr.cdc.gov/

19. EPA **Federal Register** Documents: http://www.epa.gov/fedrgstr/

20. The **Louisiana Office of Public Health's Environmental Epidemiology and Toxicology** Section provides facts on toxological, health, and environmental effects, as well as information from the NLM system. Located in New Orleans: (504) 568-8537 or 1 (888) 293-7020.
http://www.oph.dhh.state.la.us/environmentalepidemiology/index.html

21. Your local **Public Health Unit and your family physician** are additional sources of information.

22. To purchase copies of the national data or that of an individual state, call the EPA's toll-free **Emergency Planning and Community Right-To-Know Hotline**. The hotline personnel are also available to answer any other questions you may have concerning EPCRA. EPCRA Hotline: (800) 424-9346
http://www.epa.gov/epaoswer/hotline/index.htm

23. Toxic Releases **Emissions Ranking Query** Form:
http://www.epa.gov/envirofw/html/tris/reports/emsnrnk_query.html

24. **State Emergency Response Commission (SERC) & Local Emergency Planning Committee (LEPC)** contacts maintained by Right-To-Know Network: http://www.rtk.net/trisearch.html

25. Numerous books, journals, and references on toxicological, health, and environmental effects are available at your local library. **Library of Congress:** http://www.lcweb.loc.gov/
Louisiana State Library: http://www.state.lib.la.us/

26. Call the **reporting facility** of interest.

27. **Chemical Manufacturers Association** (CMA): (800) 624-4321 or **CHEMTRAC** (800) 262-8200.
http://es.epa.gov/techinfo/facts/cma/cma.html

28. **Louisiana Chemical Association** (LCA): (225) 344-2609

29. **Louisiana Mid-Continent Oil and Gas Association** (LMOGA): (225) 387-3205. http://www.lmoga.com/

30. **Center for Energy and Environmental Studies**, Southern University: (225) 771-4724.
http://www.subr.edu/CEES/

31. **Institute for Environmental Science and Louisiana Energy and Environmental Resource Information Center** (LEERIC), Louisiana State University. http://www.leeric.lsu.edu/

32. **Louisiana Environmental Action Network** (LEAN): (225) 928-1315. http://www.leanweb.org/

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